

Studies in Indian Education

By

H. N. WANCHOO

Inspector of Schools, Benares Division, U. P.

ALLAHABAD LAW JOURNAL PRESS

ALLAHABAD

PRINTED AND PUBLISHED BY M. N. PANDEY AT THE
ALLAHABAD LAW JOURNAL PRESS, ALLAHABAD

PREFACE

The studies in this book deal with important problems and aspects of Indian education. Two notable omissions are the studies on adult education and the education of girls. They have not been included because I have had no opportunity of making experiments, at first hand, on the instruction of girls and adults. They are comparatively unexplored fields in which a worker on educational problems could break fresh ground. The other studies have been sought to be based, as far as possible, on a practical programme of work which has been tried out in schools and attended with encouraging and hopeful results. No finality is claimed for any results so far achieved in the interesting enterprises of education which has been called an endless adventure. On the other hand, these studies are founded on strong convictions and a simple faith. With the passage of time, during the four years in which they have been written, the faith has deepened and the convictions have strengthened. Even so I have not forgotten that a seeker for truth in any field of knowledge has to persevere in a spirit of humility, since a facile self-assurance may easily obscure the face of truth.

I feel profoundly grateful to Mr. K. K. Sukhia, M.A., Lecturer, Training College, Allahabad, and Mr. Ali

Ameer, M.A., Lecturer, Queen's College, Benares, for reading the first drafts of the studies in this book. I cannot adequately acknowledge in words the benefit I derived from their helpful suggestions and criticism. Lastly, I have to thank Dr. B. S. Haikerwal, M.A., Ph. D., Superintendent, Reformatory School, Chunar, for valuable suggestions made just when the typed manuscript of the book was going to the press.

32 *Cantonments*

Benares

July 1934

H. W.

C O N T E N T S

	PAGE
<i>Introduction</i> —Wanted a Subject for Discourse in	
Education 	1
Ideals and Objectives in Education 	8
Some Problems in Village Schools in the United	
Provinces 	25
Experiments in Rural Schools 	38
Other Experiments in Rural Schools 	54
Economics of Village School Gardening, Farming	
and Handicrafts 	67
The Education Week 	71
Some Needs in the Present Day Secondary	
Education 	82
Experiments in High Schools 	88
University Education and Its Ideals 	100
Physical Culture and Physical Education 	114
Teachers and Their Work 	136
Trends in Education 	164
Education in Theory and Practice 	174
Quo Vadis ? 	179
<i>Appendix</i> —On Thinking 	192

INTRODUCTION

AN ADDRESS

WANTED A SUBJECT FOR DISCOURSE IN EDUCATION*

You will, I am sure, sympathise with me and extend your indulgence when I select for my address to you today the theme:

- Wanted a subject for discourse in Education.

It remains to be seen, at the end, whether the search has been successful. Meanwhile I can allow myself the latitude of talking on many and diverse things—to the confusion of critics. It may be easy to confound imaginary critics but, alas! what is one to say to a sympathetic audience. They are not so easily disposed of. They have a flattering, but awkward, habit of expecting words of wisdom to fall from the mouth of the President of an Association or Conference.

I propose, therefore, to scan the possibilities of various themes on education for a discourse; and to seek, for our mutual benefit, the grain of truth from some of the current propositions on the different aspects of Indian education.

HIGH SCHOOL EDUCATION

One of the two things which most concern us, among the sub-heads of education, is secondary education. This subject has come to mean for many of us interminable

•
*An address delivered as President of the Non-gazetted Educational Officers Association - December 1930, Benares.

talks, discussions and lectures on the Dalton Plan, the Project method, correlation of studies, in fact, all the technique of modern psychology. Another set of topics, included in any discussion on secondary education, is educational handwork, physical training and character building. A third line of approach in secondary education has been the schemes of education proposed by two schools of educational thought. The revivalist school consider our educational salvation to lie in the ancient Indian system of education, which I would call the "ashram" education, and point proudly to the interesting experiments in education conducted at the Gurukul, Hardwar, and at the Shantiniketan, Bolpur, which have attracted the attention of India and the world. The modern (or should one say the futurist) school of educational thought, of which the late Mr. S. R. Das, Law Member of the Indian Cabinet, was a prominent protagonist, swear by the English public school system as the best training ground for character and therefore especially suited for the youth of India. Somewhere between these two schools of thought, should we search for that grain of truth which we set out to seek. One obvious and commonplace solution would be to establish a synthesis between the two, and to suggest that such a new synthetic scheme of education will probably meet most of, if not all, the educational needs of India today. One could feel strengthened in the belief on the basis of historical fact. Surely such a synthesis should have its roots in ancient Indian culture and modern Indian history during British rule; we see some such system of secondary education growing, in spite of many defects and shortcomings, before our eyes. The most hopeful solution would seem, therefore, to lie in our efforts to establish a true synthesis. Of such a synthesis the essential features should be the insistence on physical

and manual efficiency of the youth taught in our schools. We have neglected physical and handicraft training in our secondary institutions too long.

PRIMARY EDUCATION

To such of us as are inspecting officers, the subject of primary and rural education will prove more interesting. I am but a new, and as yet an inexperienced guide, and shall disappoint you if you build exaggerated hopes of enlightenment on this important matter that closely concerns the education of the masses of our country. We have had the benefit of reading educational reports and important pronouncements on the stagnation and wastefulness in primary schools and the inefficiency of the teaching in the infant classes of those schools. There is little left to say. It seems that the problem of the primary education of our millions will resolve itself finally into a demand for funds and more and more funds. Funds we have not, and will not have in sufficiency for years to come. It is essential therefore that we should aim at simplicity in the equipment and organisation of our primary schools' system; such simplicity can be consistent, in our country, with efficiency. We should cease to think in terms of Western standards for our primary schools; to the extent that we have followed such standards in our secondary schools, it has only led to the reaction of the revivalist school of educational thought.

RURAL EDUCATION

The allied subject of rural education as the sole theme for the address today has proved a broken reed. Because I have committed myself elsewhere to read an address on the problems of village schools in the United Provinces in the Rural Education Section of the All-Asia Educational Conference, my tongue

should remain tied and my lips sealed today; I shall reveal only this much that if we can somehow learn to limit the growth of numbers, the two outstanding propositions of village life, and hence of rural reconstruction, are the farm and the school. The problem of rural reconstruction is the development of both; and still more important is their fruitful interaction. Now this is a generalisation, translated into educational facts it means simply that we need to give a definitely agricultural and vocational bias to our village schools so that they may become more than mere agencies of mass instruction and literacy. In plain language, make the rural schools produce things as well as teach them.

VOCATIONAL EDUCATION

This leads me to put myself the question whether I would not have been wise to choose the theme of vocational education for my talk to you today. According to educational theory—at least as it has been generally propounded—vocational education is taboo if grafted on a system of primary and secondary schools. It is argued that the liberal and general character of the education which they impart should be kept undefiled by any touch of trade. We are told, vocational education is the business of technical and industrial schools which are the domain of that functionary, the Director of Industries. This theory of vocational education has been pushed too far in our schools, whether primary, secondary, urban or rural. The proposition that, in such schools, we should have general and cultural and not utilitarian studies does not appear to be sound. No scheme of general education should be regarded as sound which ignores the teaching of subjects which have a vital connection or relation with the economic requirements of the village, the town and the city. After all the greatest vocation

is Life and Living, and no education is worth the name which does not, at least indirectly, equip people to earn a livelihood, the economic foundation of that 'complete living' which is another name for a cultured existence in civilised life.

GIRLS' EDUCATION

Having exhausted the possibilities of these themes on education which directly concern the officers of this Association, I wondered if I could grow eloquent on the subject of education of girls. Alas! my ignorance of conditions in girls' schools (you will please remember I am a mere man-Inspector) is a fatal handicap. A more convenient excuse is to take shelter behind you on the plea that you are teachers or inspectors mainly of boys' schools and your province is not to educate girls. Hence between us, the important theme, namely, the education of girls is ruled out—but not entirely. Therefore it remains for me to contribute my quota of supposed wisdom for our mutual guidance. The young age of children and social custom happily permit co-education in our primary schools. I consider that we, I refer especially to such of us as are inspecting officers, can by our efforts persuade the rural parent to send the girls also, along with their brothers, to the village primary schools. The resources of the country will not permit the establishment of a separate system of primary schools only for girls. Even if such segregate primary education could become possible, it would not be efficient or economical. If we are, then, to have co-education in primary schools, it raises the thorny question that there should be, as in other countries, also a mixed staff. To this question I can suggest no adequate answer, except to say that we have yet to create a corps of women teachers even for purely girls' schools; the problem of mixed staff

would only arise thereafter. Meanwhile, within these limitations, the only rapid and effective way open to us is that of educating village girls with village boys in the existing co-educational primary schools.

EDUCATION AT THE TRAINING COLLEGE AND UNIVERSITY

I seriously considered talking about teachers' training today; to my confusion, however, I discovered that having left the training college some years ago, I needed first myself the benefit of a refresher course to discourse adequately on the subject. I then thought of taking refuge in the theme which provides material for convocation addresses, namely, university education, especially since a large majority of you have passed through the portals of a university and its hall-mark is a passport for the profession of education. The crux of university education, and also of higher professional training, is not the acquisition of a great store of knowledge, or even of pedagogical skill, important as both of them are for a teacher or inspecting officer, but the formation of mental attitudes and derivatively, of certain habits of thought and action. As regards the habits of thought, an enquiring mind, tolerance and sanity are what all of us greatly need; *in respect of habits of action, a readiness to meet the unpleasant routine of existence with energy and resourcefulness.* That is all that I have to say to you on the subjects of pedagogical training and university education.

AIMS IN EDUCATION

No other theme now suggests itself readily except one that I have reserved for the last, namely, aims in education. This theme ought to have been the most fruitful and apparently inexhaustible subject for a discourse in education, but it has its pitfalls as I have now

discovered. I had had only a few weeks ago, an occasion to speak before a teachers' training college association on, among other things, our aims in education. A local correspondent sent a report of the talk to the '*Leader*' and the editor kindly published it. But here comes the snag; he also reported, possibly with unconscious irony, on the next page, 'Mr. Ramsay Macdonald on Education.' To my chagrin, I found that while I had satisfactorily demonstrated (according to myself) to my receptive audience that the true aim of education is to train servants of humanity and citizens of the world, a statesman like Mr. Macdonald had propounded as the aims of education, the training of people to a life of usefulness, as well as of comfort to themselves. I realised then that I had too widely generalised the aims in education. I now harbour the suspicion that in publishing our varied aims in education in such juxtaposition, the editor has been a most subtle critic. To my present self-imposed criticism I would give this answer:

That in respect of aims in education, let us hitch our wagon to a star but keep our feet (or should one say wheels, to avoid a mixed metaphor) on the solid earth. How are we to perform this double feat? I have already given a partial answer by suggesting the formation of certain habits of thought and action. To complete it, I would say, maintain the struggle involved in such a process in the face of odds.

I have rambled in search of a suitable subject for discourse in education and have no other scraps of counsel to offer. A discursive theme fortunately absolves me from the duty of winding up with a peroration.

IDEALS AND OBJECTIVES IN EDUCATION

DEFINITIONS

What are ideals in education? What are objectives in education? It is necessary to define in order to distinguish. Ideals are the aims or ends towards which the process of education is directed. A process has some measure of continuity of striving, and objectives mark the stages of the advance of the educative process towards the ideal. Objectives are consequently intermediate aims in the direction of activity towards the attainment of the ideals in education. Ideals are abstract, intangible and incommensurable; objectives are generally concrete, precise and measurable.

ILLUSTRATIONS

Ideals in education may be of two kinds, mechanistic and individualistic, or a synthesis of both. Mechanistic ideals aim at the education of the citizen. The education of the individual, according to Bertrand Russel, is subordinated to the mechanism of the state. States of the West and of the East, notably Japan, are intensively and nationally self-conscious and inoculate the education of the individual with their own social, economic and political doctrines. That is to say, the education of the child and youth is forced into these mechanisms, instead of being free and flexible to suit individual needs. For example, the educational ideal of pre-War Germany was to produce an efficient citizen of the state. In this conception, the educational system

was a machine of which the finished product was the citizen (not the individual), whose *raison d'être* was that super-entity of Hegelian philosophy, the state, which is an incommensurable idea. The immediate *objective* of the present day India is to abolish her appalling illiteracy, and mass literacy is susceptible of statistical measurement in terms of percentages. The Aristotelean *ideal* in education was to educate the leisured class for the right use of its leisure. This is the modern conception of education for the sake of culture, which is an indefinable abstraction. A popular *objective* in education in India is vocational education, a scheme of studies in which the practical and utilitarian bias is prominent. This objective reflects the popular reaction against the literary and unpractical character of Indian education and is expressible in terms of curricula (based on a correct appreciation of child psychology) which will take account of the practical intelligence. Vocational education is craft education, and crafts are concrete objectives. Modern experimental psychology has established the educational principle of learning by doing. This principle is now translated into a more rational scheme of studies and into a well organised system of industrial and technical schools. If the ideal is rightly conceived, education must equip a person incidentally to earn his livelihood. Earning a living is an *objective* which should not, however, form the whole content of the ideal in education. The American *ideal* in education is to 'raise' a hundred per cent citizen of a free democracy, which is an intangible conception: the *objective* is to displace classical education by utilitarian and scientific courses of studies essential for a highly industrialised social order. The *ideal* in education of ancient India was the attainment of wisdom, that is the enlightenment which is born of the realisation of the eternal verities in life, which

is a concept of religious philosophy: one *objective* in education founded on this ideal was the observance of 'brahamacharya' or sexual continence.

Other ideals in education, such as the building up of character, or self-expression and self-realisation, or the unfolding of the divine in Man, are similar abstractions: *per contra* the mastery of the three R's, or the instruction of defectives, or hygiene and temperance teaching, are concrete *objectives* in education.

DESCRIPTION

Objectives change quickly, ideals slowly. A change in the ideals of education generally marks a revolution in the polity of the state. Change in ideals is also the evaluation of changing social and moral values. A notable effect of politics on education is the evolution of the German ideal in education, after the defeat of Prussia by Napoleon, which culminated in the Hegelian apotheosis of the state. Prussia seeking for her political regeneration found in education her first line of advance. An example of sociological influences in education is the emergence of democratic ideals in America. It is an axiom of democracy that opportunities for higher education and for diffusion of culture should be as broad-based as possible. The growth of democracy is a sociological as well as a political phenomenon. Since the establishment of the American republic, social evolution has been far more rapid than the changes in the constitution, and has profoundly influenced education.

Objectives, as they are attained, make room for other objectives. In England every child upto the age of 14 receives free and compulsory instruction, and this stage of education is called elementary, primary or junior secondary. The post-War Education Acts are designed to advance the age of free compulsory

instruction upto 15, and the Fisher Act of 1918 aimed at advancing the age of compulsion upto 18. That is to say, the objective was to provide free (or practically free) secondary education for every child. Want of funds has held up the enforcement of the provisions of the Fisher Act. •

Ideals are dynamic and objectives are static conceptions. An ideal implies perfection, which is not possible of attainment; an objective ceases to be such when it is attained. Self-realisation as an ideal is a dynamic aim in education: earning a livelihood is a static end of education.

An ideal is a complex whole, an objective is a product of simple factors. Herbert Spencer's ideal was composed of a trinity of aims; it was a summation, or possibly an integration, of physical, mental and moral education. The ideal of ancient India, namely attainment of wisdom, or the Froebelian ideal, namely the unfolding of the divine in Man, defies analysis. Success in examination competitive or otherwise, is an objective, since it is a simple proposition of 'bread-and-butter' studies.

THEIR USE

This academic discussion of ideals and objectives will serve to clarify ideas; and with their help it is possible to discern the strength and weakness of the Indian educational machine as modelled on the Western pattern and to appraise it. The definitions of ideals and objectives are therefore intended to crystallize ideas, to give precision to thought and to serve as aids to diagnosis and discovery. The rest of this study will be an attempt to show that the present-day Indian educational system, both in its origin and development, has been handicapped by a lack of ideals. Modern Indian education has had objectives which have

sometimes been confused with ideals, but professedly it has had no ideals.

CLASSICAL AND THEOLOGICAL EDUCATION

Prior to the nineteenth century, Indian education in common with education in the European countries, derived its ideals from the classical and theological traditions. European educational systems looked for the fount of wisdom in the classics of Greece and the civilisation of Rome. Indian education sought spiritual inspiration from the wisdom of the ancient Aryans and intellectual nourishment from the culture of Islam. The languages of classical antiquity, Hebrew, Greek and Latin in Europe, and Sanskrit, Arabic, and Persian in India, were the recognised media of higher education, intellectual advancement and culture; and each had a well-developed literature. The classical languages were something more; Hebrew was the language of the Old Testament, Greek and Latin of the New; Sanskrit was the language of the Vedas and Arabic of the Holy Koran. Consequently the classical tradition in education was inextricably mixed up with the theological tradition. The systems of education founded on the study of the classics and of theology were similar in traditions and aims—traditions of unquestioning respect for authority derived from ancient teachings and aims of intellectual scholasticism and spiritual dogmatism. These traditions and aims in education sterilized both the intellect and the spirit. The mastery of the classics, whether in the East or in the West, was traditionally the occupation and the privilege of the elect, namely, the mullahs, the pandits and the clerics. The patronage of the classics was the prerogative of courts and kings; and latterly the rich, including the nobility and the landed aristocracy, devoted their leisure to the study of the classics for the

sake of culture. As the language of the common people was considered inferior to the classical languages, the classical tradition was responsible for undemocratic aims in education. It created an intellectual aristocracy, both exclusive and superior. In the East and the West, theology found in classical education a valuable ally for the maintenance of the ecclesiastical supremacy over the common people. Priestcraft reinforced the undemocratic influences of the classical conception. Both exalted tradition above innovation, authority above intellectual curiosity, dogma above the spirit of free enquiry, and knowledge above wisdom. In spite of these shortcomings Indian education, prior to the nineteenth century, held to its ideals. The objective of earning a livelihood had no place in the scheme of Indian education in the past; and this ancient legacy may have left traces of an unpractical tradition which has been intensified by the developments in education since the nineteenth century.

WESTERN MISSIONS AND EDUCATION

The early beginnings of Western education in the nineteenth century were in Bengal. Missionary enterprise supplied the incentive. High schools and colleges were started by Christian missions to instruct the people. But education in these institutions drew its inspiration from evangelical zeal, in effect therefore it became a means for the conversion of the people of India to Christianity and the most fruitful channel into which such zeal could be directed. The spread of Christian ideals and Christian modes of thought and conduct, in themselves admirable, could not, on this account, be considered correct aims in education in India. Education was not valuable *per se*. Hence arose the apparent paradox that the Gospel became the *objective* although as religious philosophy it has the

character of an *ideal*. Christian ethics would have retained its character as an ideal in education if it had stood alone. It is generally associated with dogmatic theology which is a doubtful ally. Dogmatic theology stands inevitably for a church and as an institution Christianity has been less acceptable to the majority of people in India than its ethics. In spite of the admirable achievement of missionary enterprise in the field of education itself, it is institutional Christianity, and not the teaching of Christ alone, which has been considered by the people as the objective of missionary effort in education.

During the last two decades, mission schools and colleges have stressed purely the educational part of their work. Missionary enterprise in education was followed by other efforts in the field of education. Secular aims and influences therefore manifested themselves in the development of education on the Western model in Bengal and elsewhere in India. This educational system was established to introduce the people of India, according to Raja Ram Mohan Roy, to the science and learning of the West; it became in reality a machine for producing subordinate officials required by the administration. Early during the introduction of English education in India, therefore, this *objective* of education namely to supply recruits for the subordinate services was either overlooked or confused with Raja Ram Mohan Roy's idealism.

THE NEW EDUCATION AND ITS CHARACTER

This historical development of the educational system can be established by examining the character of the new education of the early nineteenth century. It was entirely literary and dominated by the examination system leading to a diploma or a degree. Education intended as a passport to 'service' under the administration needed to be literary, since the work of

subordinate officials was clerical, and required the hallmark of a certificate conferred on the results of an examination. The educational system had initially but one point of contact with the varied needs of the Indian environment, the requirements of the governmental machine. An objective so restricted in conception destroyed the freedom and flexibility of educational effort. The business of education was artificially simplified into the moulding of the varied individual faculties on a common pattern. A rigid uniformity and disregard of practical intelligence were the consequences of such an objective. At the outset of its career the new educational system was responsible for an erroneous step (Indian opinion at any rate regards it as such) in the history of Indian education. The idealism of Raja Ram Mohan Roy, the undeveloped state of the indigenous vernaculars and the needs of the administration, combined to make English the medium of instruction, not only of higher education, but gradually of school education as well. English should have been assigned its proper place in the school curriculum as the principal foreign language. It was made to replace the mother-tongue as the medium of instruction in practically all the school subjects, and then it retarded the development of the vernaculars as suitable media of instruction and, worse, it retarded education itself. Learning through English handicapped the child and made mass education impossible. English education became attractive through its prizes and led to the decay of indigenous schools, the *tols*, the *pathshalas* and the *madrassahs* which provided, at a low cost, some education for the masses. It has taken a century to retrace that step and the process of replacement of English by the mother-tongue in the school curriculum is still incomplete. The change in the medium of instruction from English to the mother-tongue has met with strong

criticism from those who find in it the sole cause of the deterioration of pupils' knowledge of English in high schools. Other means for strengthening the teaching of English are available and need to be tried and exhausted, before critics could justly condemn a step so obviously necessary in the interest of the education and health of the scholar. Further it should not be forgotten that the curriculum has become heavier than it used to be prior to the change. For the pupil to learn history, geography, mathematics, science and every other addition to the curriculum, such as, nature study, hygiene, even the mother-tongue, through the medium of English is to make his task cruel and burdensome. The teacher is the principal agency of education and the need to improve the standard of attainments in English could be met by the employment of especially qualified, better paid and otherwise more competent staff for teaching English. Refresher courses for teachers of English could be held at training colleges, not fitfully, but as a planned and permanent organisation for improvement of standards of English teaching in schools. The syllabus of courses in English needs to be so revised as to enable the scholar to develop simple and idiomatic expression in English speech and composition. The smattering of English literature which he now acquires in the high school is practically useless to him. The improvement of the English section of the school library, the organisation of a reading room and the provision of linguaphone equipment are other means still to be tried. The additional cost of the measures advocated above would be nothing compared to the enormous saving of pupils' time and energy made by the abandonment of English as the medium of instruction and examination. In one way the use of English in the many school subjects was particularly harmful to pupils, because the English

pronunciation and idiom of the numerous subject teachers were anything but a good model for teaching the English language. It follows that subject masters, other than the especially qualified teachers of English, should now adhere strictly to the use of the mother-tongue. Unfortunately, they are prone to teach through a mixed medium which is neither good English nor good Hindustani. The critics are on stronger grounds when they point to this weakness. The development and strengthening of the mother-tongue would, it is strongly hoped, remove these shortcomings of the transitional period.

In the sphere of university and collegiate education, it was then possible to justify the use of English as a medium for higher studies. Nevertheless English education, as it was planned and motivated, has produced unexpected reactions. It has estranged the intelligentsia from the masses. It has bred a sense of superiority in the former and suspicion among the latter. Lord Ronaldshay (now Zetland) has pointed out the unnaturalness of the fact that the noted litterateurs of Bengal, of the last century, were proud to confess that they thought in English and even dreamt in English. In effect, therefore, such Indians had become aliens in their own country. Against these effects of English education, gains can be set off. English introduced India to the sciences and the scientific outlook of the West; it taught India nationalism through British history and English literature, as the pages of the one and the books of the other breathe a passion for political liberty. These results however do not disprove the fact that the aims of the educational system were mere objectives or objectives mistaken for ideals: the incidental benefits derived from that education were bye-products, not conceived as conscious ends of the system. A closer examination of the initial organisation of secondary and

university education will serve to emphasise this conclusion. As education of the masses was neglected, there was no organisation of primary education.

The secondary schools system was dominated by the school leaving examination certificate which was the minimum qualification for entrance into the lower ranks of government service and into a university college. The school curriculum was dictated not by the agricultural, commercial, industrial, cultural or even professional needs of the environment (local, provincial or Indian) but was imposed *ab extra* by the university, which was not an organisation for teaching or for higher education but a purely examining body, for purposes of its Matriculation examination. An outside body like the university did not take account of individual needs of the pupils or of their environment, did not prescribe a scheme of school studies sufficiently elastic to suit diversity of aptitudes, and neglected the cultivation of the practical intelligence. The schools consequently became coaching institutions in which even physical training was neglected. The sole concern of the high schools was preparation of their pupils for the Matriculation examination. The instruction provided—it did not deserve the name of education—was literary, as the schools had neither the funds, nor the equipment, nor any use for practical studies like handicrafts, or for art studies like music. Drill and drawing, when schools made the grudging concession of including them in their curriculum, were the Cinderella of school studies. Secondary education in the West has also suffered in the past from similar defects and has, at one time or another, been subordinated to examinations. But it has never been so planned or conducted as to disregard completely the needs of the environment as in modern India. Nor has it been dominated by so restricted an objective as a school leaving examination

certificate, leading to an office stool or to a university diploma or degree, which in its turn would be the stepping stone to a higher office stool. Girls' education, provision for which is still practically negligible, was modelled on the same pattern. No provision was made in the scheme of studies, or in the examination system, for differences of sex or diversity of vocation in life. Such was the state of secondary education until the last two decades. Since then the gradual inclusion of manual training, educational handwork, nature study, science, agriculture, commerce, music, domestic science for girls and organised physical training in the secondary school curriculum and the spread of boy scouting, have made the school a vitalising centre in the life of the people. *This process of adaptation of the secondary school to the psychological needs of the child and the practical needs of the man is however in its initial stage.* There is still considerable leeway to make up; when the process is complete, the character of our high schools will have undergone a revolution. English education has so far produced only clerks and school masters. The system has made the youth of the country unfit for practical pursuits, weaned them from their hereditary occupations, agricultural and commercial, and destroyed the dignity of manual labour. One example will be sufficient. A barber's son, who had passed the High School Certificate examination, applied for a clerkship for which he was unfit. He failed to get it. He could have earned his living as a barber; it was doubtful whether he returned to his father's profession. The educational system has created an educational proletariat. To meet this situation Government have started a number of technical, industrial and agricultural schools. Many more are still required; and alongside these craft schools, there must be corresponding developments in agriculture, commerce and

industry. To absorb the vast surplus population of the country in profitable occupations, India and her Government have to start their own Five Year and Ten Year plans.

University education was, until the last decade, collegiate education, as the university was an examining body to which colleges in different parts of the country, often in distant provinces, were affiliated for the purpose of the intermediate and degree examinations. The college system was a magnified replica of the school system. As in the latter, the only allegiance the colleges owed to the university was to follow the courses which the university laid down for its various examinations. The ideal of the university as a corporate teaching body, as a centre for radiating culture and widening the bounds of knowledge was non-existent. The colleges, each self-sufficient, taken up with preparing students for examinations leading to a university degree which was to be the open "sesame" to the doors of government offices, were ill-equipped to discharge their inspirational and cultural functions, and contented themselves with being the purveyors of second hand knowledge*. As the flux of seekers after a degree increased, the college became a factory for the manufacture of graduates and ceased to be a fount of inspiring ideals. The university degree became not a hall-mark of culture, but a saleable commodity in the clerical, pedagogical and learned professions, and even in the marriage market. The increasing number of graduates has also created a serious unemployment problem. In the last quarter of the nineteenth century, the establishment of colleges of law, medicine, civil engineering, and later of education, has provided an improved variety of the purely arts

**Vide* Appendix : On Thinking

colleges. The sciences were late entrants into the scheme of college studies. The professional colleges have also led to over-crowding in the learned professions. A notable example is provided by the practice of law. Colleges of agriculture, forestry, mining and technology, where they exist, are of more recent growth. The main objectives of collegiate education have, however, been government service and the learned professions, such as law, medicine, education and engineering. These aims have been destructive of the spirit of adventure and daring in the youth of the country, and have bred a 'safety first' mentality. The system has certainly produced great lawyers, administrators, politicians, reformers, statesmen, even poets and scientists, but they have been all too few. Uncharitable critics contend that the great men may have been nominally the alumni of the system, but they have achieved greatness in spite of the educational machine.

ITS EFFECTS

Although the defects of the educational system had been realised by Indian educationists and thinkers at the close of the nineteenth century, it was in the second decade of the twentieth century that the full effects of the modern Indian education became manifest in the increasing unemployment among the educated middle class. Moreover this class find themselves handicapped for agricultural, commercial or manual occupations because their education has either destroyed or diminished their capacity for such pursuits.

The Indian intelligentsia has attempted to diagnose the defects of the educational system variously: it has made men mercenary and does not build character; its aims have been secular and leave no room for godliness; it has neglected physical, moral and religious training; it has made men unpractical and has neglected

vocational education; it has been imposed *ab extra* and has no roots in the needs of the environment; it has had no use for knowledge for its own sake; it imparts instruction through a foreign tongue and has made sound education impossible; it has estranged the masses from the educated classes and made an educated Indian feel like an alien in his own country; and lastly, it has utterly ignored India's past culture, traditions, philosophy, arts, learning and history and has bred in the youth no love for their country. Each critic has prescribed his remedy for the symptom of the disease he has diagnosed in the educational system.

LACK OF IDEALS

The problem has not been simple, and partial reforms in education have failed to improve it. Modern Indian education, it will be seen from its history, has had no well-defined aims and has made objectives serve the purpose of ideals. As objectives change quickly, so the early proselytizing aims of the educational system succumbed to the attractions of government service. The lure of service, as posts became scarce and seekers after service more numerous and clamant, diminished temporarily and partially, since vocational colleges appeared to open more lucrative avenues of employment in the technical and learned professions. The overcrowding in the legal profession led to the popular demand for more vocational, practical and technical education. Therefore criticism of the educational system has led to the substitution of one objective in education for another. The change in the objectives has made the problems of Indian education appear simple; the real lack has been the want of an ideal in education. What Indian education has needed is not the transition of static ends or objectives but a comprehensive and dynamic aim. This is a critical survey

of the Indian educational system as it has developed since the nineteenth century; the evolution of ideals and the search for them are the subject-matter of the final study. The forces making for the evolution of ideals are briefly indicated below.

TRENDS IN EDUCATION

There are political, economic, social and educational causes at work which should lift Indian education out of the vicious circle of rule-of-thumb objectives to the plane where a comprehensive aim may direct its activity, and thus an ideal, a vitalising force, inform its purpose. Of these causes the political forces are apparently the most powerful. A reference has been made to the lessons in nationalism taught by British history and English literature; to these should be added the awakening of Asia in the twentieth century and the ferment of the War in which the doctrines of self-determination have made peoples more nationally conscious. The consequence has been that Indian aspirations for nationhood are seeking their fulfilment through constructive efforts and ideals in education. The forces of nationalism have created that insistent objective of political India, the education of the masses. In the twentieth century, the ideal of education, to be comprehensive and true, must make that education as broad-based as possible. The poverty of the people, the world wide economic distress caused by the War and the widespread unemployment among the masses and the educated class have led to the popular demand that education should be of a more practical character to enable the sons of India to exploit her vast natural resources and to fit them for world competition in the struggle for existence. Of the social forces, the most notable are the movements for the emancipation and equality of women and the depressed and backward classes. The

function of education is, it is contended, not only to provide equality of opportunity, but to spread a humanising culture. It is now recognised that social abuses and anti-social customs are due to ignorance and superstition; that the cultural and humanitarian light of education should dispel their darkness.

The results of experimental psychology and the consequent advance of education as a science, have altered the methods of pedagogy in the West, and these in their turn have influenced methods of teaching in India. The labours of the Calcutta University Commission 1917—1919, have resulted in the establishment of a number of unitary universities whose function is to advance as well as to teach existing knowledge and to be centres of cultural inspiration. It remains to mention the last factor (more elusive yet) potently at work in Indian education, the spiritual endeavour of India's religious reformers and thinkers. Dayanand's revival of Vedic ideals embodied in the Rishikul, Hardwar, U. P., Tagore's internationalism illustrated in the foundation of the Vishvabharti, Bolpur, Bengal and the latest doctrine of *ahimsa* and love, as preached and practised in some of the "vidyapiths" founded during the last decade, are forces whose educational value is incalculable. It is a significant fact of education in India today that her foremost spiritual thinkers should have made experiments in education. To sum up, nationalism is giving India an incentive to mass education and consequently to broad-basing of education; poverty and unemployment are forcing our hands to impart to it a practical character; social causes, a humanising and cultural mission; educational experiment and science, method; and her sages, spiritual foundation. Whether the ideal will be well and truly conceived, time alone will show.

SOME PROBLEMS IN VILLAGE SCHOOLS IN THE UNITED PROVINCES.*

THE NEEDS OF RURAL INDIA

During the present century, town dwellers in the United Provinces and other provinces of India have grown into the habit of envisaging the problems of education as those that concern only them. This disregard of the educational (and other) needs of the rural population in a country containing (in overwhelmingly large numbers) small village communities is regrettable but true. The causes of the neglect are well-known. The decay of feudalism, the advent of the Industrial Revolution in India, the growth of an educated professional class mainly urban, the disproportionate rewards reaped by the intelligentsia in government offices owing to the advantages of English education and the lack of social, civic and cultural amenities and communications in rural areas have shifted the centre of gravity of national life from the village to the town. The dangers of such an unstable situation in an agricultural country have now been realised by the people and the Government. Interesting experiments in reconstruction of village life have been made by official and non-official agencies in the Punjab and elsewhere. The government departments of agriculture, public health, co-operation and education have now shown an increased activity in devising schemes for rural

*An address read in the Rural Education Section of the First All-Asia Educational Conference, Benares, December 1930.

development; where roads exist motor traffic has rapidly linked the village and the town. In spite of the growing facility in transport and departmental activity, so far no appreciable change is noticeable in the life of the village. A great deal is now heard and will continue to be heard in the press, in government communiqués and on the platform about rural reconstruction. It is good that political, economic and social causes are focussing the attention of politicians, economists and humanitarians on the problems of village life. It would be better if the misery of that life could be mitigated and the lot of the village folk ameliorated by their constructive efforts. With the development of the theory and practice of democracy in India, the needs of the people who inhabit the vast countryside must claim the first care of social philosophers, professors and public men. No political party of the future should dare to disregard, if it would survive, the votes of the silent millions who live in the villages. An expanding population points urgently to the need for intensive agricultural and industrial development to support the increase in numbers. Unemployment in towns has to be met by the growth of industries and the villages must supply the raw material for them. An illusive social factor is also emerging. The revivalist recalls, with the pride of heritage, the village life of ancient India when presumably the land was flowing with milk and honey and the lion and the lamb lay down together peacefully. This is the 'Ramarajya' of his imagination and he wishes wistfully to recreate it. These combined influences have made the problem of rural reconstruction of first class importance. How to combat the appalling poverty and ignorance prevailing in the villages of India is the fundamental question? The schémes of village reform are generally classified under the heads, economic development, education

and public health. The problem of public health is the awakening of the hygienic conscience of the village community. Such awakening is in the nature of an educative process. The United Provinces Public Health Department has therefore selected the village school as the agency for its propaganda and the instrument for the success of its Village Aid Scheme. Economic development is another name for the application of scientific method to village agriculture and industry and its successful demonstration, for the benefit of the villager, through model farms or cottage industries. The peasant has to be taught to grow two ears of corn where only one grew and to double his production; by increasing his income he would add to the wealth of the country. Establishment of banks and societies on a co-operative basis and growth of communications are other factors in economic development. The growth of communications depends ultimately on the increase of national wealth through agriculture and industry. It is not of course essential that the villager should be literate or have had some schooling to adopt methods of farming that have been demonstrated to him to be more economical and productive, or to borrow money from a co-operative society or bank to avoid getting into the clutches of the *bania*. A farmer, though illiterate, is generally shrewd in matters of husbandry. Nevertheless he will, if he has been to a school or is otherwise literate, more readily realise the economic advantage of such methods of farming and borrowing. Moreover he will, if he is educated in the right way, be able to shake off successfully the tyranny of injurious social customs which clog his life and lower his vitality and productive capacity. His womenfolk, through lack of education, cannot become efficient helpmates or mothers of his children. It follows therefore that the village school should become an important agency for economic

development. What then, in the last analysis, is rural reconstruction? The words poverty and ignorance supply the clue. *The school and the farm and the interaction of the two are therefore the central problems of village life.* This analysis of the vital elements in rural India (the elements are India-wide) must however be conditioned by one basic consideration that the population of the country does not go on increasing. Unless the villager is somehow taught birth-control, the overflow of numbers will make it impossible for the school either to instruct the ever-increasing flood of children or to become a centre of economic and cultural development. Beyond pointing out the need for birth-control its discussion will not be relevant.

COMPULSORY PRIMARY EDUCATION

The problem of stagnation in both rural and urban primary schools has been discussed at length, in the press and in the Legislative Council and more recently in the report on education by the Hartog Committee of the Simon Commission and needs no emphasis here. A very great proportion of the children who are reading in the primary schools do not complete, before leaving, the full five years' course of the primary stage of instruction; to remain literate through life it is essential that they should do so. In 1933, out of a total of 11 lakhs and 38 thousand children in primary schools only one lakh 94 thousand were found reading in the two top classes of those schools. The great majority of children who leave off at the end of the preparatory stage—a three years' course of instruction—very rapidly forget the elements of literacy they have acquired and lapse into illiteracy. How is this wastage of time, effort and money to be avoided? A palliative would be so to improve teaching especially in the infants class and generally during the preparatory stage that a child, even

on leaving off, should be able to retain the ability to read and write throughout his life. To create a corps of such skilfully trained teachers of very young children does not seem practicable. The entire absence of women teachers, who are naturally better equipped than men, for the instruction of the child during his infant and preparatory stage of education is only one of the difficulties. Small village libraries need to be dotted all over the land, but the lack of funds is now a chronic condition of local bodies and governments. In the circumstances, the only solution for the present is that the child should somehow complete his five years' course at a primary school. The willingness of the average parent voluntarily to keep the child at school for the full period of five years, when the latter can be immediately put to some occupation that will supplement the scanty family income, can not be relied on to eliminate the wastage. The experiment of voluntary retention by parents of their children at school until they complete the period of primary instruction has not, judged by past and present experience, succeeded. Consequently the introduction of compulsory primary education for boys, between the ages of 6 and 11 years, in rural and urban areas where the local bodies can meet one-third of the cost involved in such compulsion has become the declared policy of the United Provinces Government. Upto March 31, 1933 compulsory primary education had been introduced in whole or part areas of only 24 out of a total of 48 rural boards. In 1933, the percentage of male and female scholars to the total population in the United Provinces was respectively 5.3 and .8; for boys and girls combined 3.17; whereas according to the last census at least 14 per cent of the total population have been reckoned to be of school going age. The resources of the local boards and Government are restricted, and the levy of additional

taxation is necessary if the pace of introduction of compulsory primary education in rural areas is to be accelerated. Further taxation however either does not yield an adequate income or is otherwise not feasible. Consequently the present economic depression is paralyzing all new schemes of expansion of education.

SCHOOL BUILDINGS

In respect of existing rural schools, a very urgent need is the provision of adequate buildings for them. The majority of rural and urban board schools have no buildings of their own and are held in borrowed or rented houses which are entirely unsuitable, dark, narrow, and ill-ventilated. The health of scholars suffers, no efficient teaching is possible and the playground and garden are conspicuous by their absence. The staff become negligent and plead the lack of a suitable school building in justification of the inefficiency of the school. Government have given grants in past years for the construction of rural primary school buildings to local boards, who partially supplement the grant from their own funds or generally from savings, if any, in their education budget. These resources have so far proved inadequate for the very large number of primary and middle school buildings required. The rural boards and the district inspecting staff should tap another source for the provision of school buildings, namely, local effort. Local zamindars and peasantry can be and have been persuaded to provide land and to construct buildings for schools wholly or partially at their own cost. A number of middle school buildings have been so constructed in the rural areas of the Benares division and elsewhere. Some boards have constructed at their own expense school buildings with thatched and country tiled roofs, which are cheaper to construct but more expensive to maintain in good

repair than entirely 'pucca' school buildings: Other boards can follow the example. Maintenance in good repair of the existing school buildings has been sadly neglected by the boards' authorities; the neglect is due to faulty administration rather than lack of funds. The petty repairs and maintenance of school buildings can with advantage be entrusted to the headmasters of the schools concerned under the supervision of the district inspecting staff; the building department of the rural boards has proved too slow and centralised for this purpose.

THE CONTENT AND CURRICULUM OF EDUCATION

The curricula prescribed for village schools have been modelled largely on the courses of study taught in anglo-vernacular urban schools; they have been literary in character. The evils of chronic unemployment of the educated youth of our towns and their incapacity for practical pursuits resulting from a scheme of studies that entirely neglected the training of the practical intelligence, have now been reproduced on a vaster scale in the countryside. This has led during the last decade to the inclusion of agriculture, rural knowledge and manual training as subjects for study and examination in rural middle schools so as, in the words of the United Provinces Government, "to ruralise the character of our rural schools." This ruralisation process is going to be slow, since there are over 700 such schools in the United Provinces. So long as the villager's son, who passed the departmental examination at the end of the course provided by the rural middle school, secured 'service' or employment as a village school teacher, he was a source of pride and gratification. With increase of numbers and scarcity of employment the shrewd peasant has realised the futility of an education that not only incapacitated the village lad from working on the farm or in the shop but led him to despise such

occupations. Virtually, the rural middle school was severing from the native soil the hereditary roots of the village lad, nurtured for centuries in his environment. How to preserve this vital attachment of the village boy to the land and practical pursuits of his surroundings and yet not to narrow the bounds of his ambition is the present problem? Until formal courses in agriculture, rural knowledge or a handicraft are introduced in all rural middle schools, a measure of elasticity in the timetable and courses of study is the essential need. At present a rural middle school is conducted as a coaching institute for the Vernacular Final examination. The staff and scholars follow the literary curriculum closely. They have become so wedded to it that teachers and boys have now to be rigorously compelled to devote a part of the school day to some simple practical work of a useful character such as planting a school garden (land is generally plentiful in rural schools) or making basket or mat or rope weaving or a local craft or cottage industry. Such occupations, by training the practical intelligence and mitigating the monotony of linguistic and literary studies, will react favourably on the pupil's general intelligence. The simple needs of the local environment will provide the necessary background which will give meaning to what the child is taught; the present methods of teaching lack such meaning. The theory that secondary institutions, rural or urban, are not technical schools and their primary function is to provide a sound general education has been pushed too far, especially in rural middle schools. The soundness of that general education which has so entirely ignored the practical needs of village life is so patently questionable that it is surprising that such education has escaped challenge so long. The remedy is simple; with little encouragement village boys can be made to 'do' as well as to 'learn' things. The staff and the inspecting officers have only to direct pupils'

energies into such fruitful constructive activity. A detailed account of how these principles have actually worked in practice is given in the study on the Experiments in Rural Schools.

ADJUSTMENT OF VILLAGE SCHOOLS TO RURAL NEEDS

In the press and the Legislative Council of the United Provinces, the establishment of special high schools for the needs of rural areas has been advocated. The question has been discussed whether "vernacular" high schools should not be started in which the instruction will be conducted solely through the medium of the vernacular. There already exists in smaller country towns a number of aided anglo-vernacular middle schools. If they are recognised as English high schools on the condition of their developing a strong agriculture side, preparing candidates for the High School examination with agriculture as an optional subject, they will provide the necessary facilities for high school education suited to the especial needs of village boys. The United Provinces Government have now resolved to make the mother-tongue the medium of instruction upto the high school stage. Thus the high school curriculum will cease to be entirely dominated, as at present, by English although it should continue to form an important subject of that curriculum. The ruralisation of existing English middle and high schools and the introduction of the mother-tongue as the medium of instruction will meet rural needs better than the establishment of "vernacular" high schools as a new type of institution.

Primary education is not weighed down by the incubus of a departmental or public examination, nevertheless it is just as much strait-jacketed by its literary curriculum as education in the middle and high schools. In primary schools, if anywhere, should there be full freedom and flexibility of education. The period of five years leaves

ample margin of time for teaching children, alongside of the rudiments of primary instruction, some practical pursuits of a utilitarian character. These pursuits deserve to be recognised, for their intrinsic educative value, as legitimate school activities. If they are made slightly profitable (it is possible for children to make simple articles of utility which can be used in their homes or sold), the parent's disinclination to keep his child for the full primary course, for the sake of the small pittance that the child may be made to earn by being kept at home, will have been partially overcome. The monetary value of the output of the child's manual activity may be negligible, its psychological value to him and for his parent will be great. The village primary school should therefore function so as to fulfil these new tasks as well.

Conscious efforts of the village school teacher and the inspecting officer should, therefore, be directed to such ends. For such efforts to be fully effective, village school teachers need to be trained at their training institutions in some simple village industry or craft. Every training school (for the training of primary school teachers) and normal school (for the training of middle school teachers) need to have a farm attached to it. The United Provinces Government have now decided to teach rural knowledge and agriculture in every such training institution. The village school teacher should, in addition to agriculture, be taught simultaneously a subsidiary village handicraft. The inspecting officer who is generally trained at a training college should have preferably specialised in woodwork. If he has also had a rural upbringing he should soon be able to reform the character of rural education and the village school.

HEALTH AND PHYSIQUE IN VILLAGE SCHOOLS

Physical training has been neglected in village schools. The teacher has had no adequate qualifications for and

interest in the task. Three superintendents of physical instruction have now been appointed by the United Provinces Government and they are training some teachers at normal schools and organising other centres for six weeks' intensive training of village school teachers in more effective modern and indigenous methods of physical instruction. Swimming, wrestling, 'lathi' and 'lezim' exercises and scouting are some of the inexpensive forms of physical education especially suited to village needs. It will take a considerable time for all the teachers to be trained and for the effect of such training to become visible in the improved physique and alertness of village school boys unless special measures are adopted. These measures are discussed in a later study on Physical Culture and Physical Education. The Public Health Department has published, as the result of experiment and research, a scale of dietary for hostel students in urban and rural areas: butter, meat and eggs, and even milk and ghee are entirely beyond the means of the average villager. Cereals, pulses and gram is all that he can afford for the half-starved children. Experience shows that for want of correct guidance, the peasant sends with the boy, when going to school, for the midday meal more often the least body-building and nourishing of the grains, for instance parched rice. The average parent needs authoritative guidance, based on a recognition of his very limited means, on children's dietary from school health officers and teachers. Sprouting gram has been found to be a very inexpensive and nourishing food and has now been recommended for use in all kinds of schools. Medical inspection of village school children is now done by the Public Health Department; and while a good beginning has been made, a great deal still remains to be done in this direction.

GIRLS' EDUCATION IN VILLAGES

The most outstanding problem in the village schools is how to educate the girls. The provision for secondary education of girls in rural areas is negligible; the difficulties are lack of qualified women teachers, funds and resources and a prevailing apathy in villages towards the education of girls. In primary schools, the position is simpler; social customs and the age of children permit co-education during the primary stage. It follows that girls should gradually be enrolled in equal numbers with boys; at present scarcely 7 per cent are reading in co-educational primary schools. It will never be possible to establish an entirely separate primary schools system for girls; neither funds, buildings, nor women teachers will be available for such development. In 1933 there were over 68,000 girls enrolled in girls' primary schools against 62,000 girls reading in boys' primary schools. If girls are enrolled in primary co-educational institutions these will need to be staffed by both men and women teachers. Public opinion will have gradually to be educated to accept this arrangement of mixed staffs; as yet women teachers are not available in sufficient numbers to staff even purely girls' schools. When larger number of girls pass the full primary course, the establishment of more rural middle schools for girls or their enrolment in the existing middle schools for boys (which will then become co-educational in practice, if not also in theory) will become inevitable. Handwork suitable for girls should form an important feature in primary schools and special courses in domestic economy and hygiene should be introduced in middle schools for girls. The girls' physique and its development would need special attention in the school as on the physical well-being of the future mothers depends the welfare of the race.

A VIGNETTE OF THE VILLAGE

The reform of the village school therefore lies in two

directions: its adaptation as an agency partially productive of tangible utilities in rural economy and an instrument of co-education in both the primary and middle stages. Mention has been made earlier of the school and the farm and their interaction as the basic factors in rural reconstruction. Let us re-create in imagination the village of the future, the smaller farms tilled by agricultural implements and ploughs, which cease to remind one of antiquity; oxen and cattle well fed and cared for and fields enclosed by hedges; the dwelling place, a hamlet consisting of rows of cottages, homely but (whether mud or brick-built) well-thatched and scrupulously clean; the village 'pucca' well or pond at which straight-backed women cluster, dressed tidily in multi-coloured 'saris' or skirts, to fill their pitchers, or to take their bath; the sturdy men-folk working in the fields or their workshop clad in well-washed homespun made by women's (and men's, in their idle hours) busy industry in their cottage-homes; the village 'kachcha' roads with rows of shady banyan trees planted on both sides, free from pits and ruts that make them, during rains, cess-pools of malaria; the soakage pits dug at a little distance from the hamlet to serve as receptacles for refuse and reservoirs for manure; the larger of the hamlets proud in the possession of a dispensary, co-operative bank and a grove for celebration of village feasts, fasts and festivals; and last but not least, radiant-faced village boys and girls, washed and plainly but cleanly clad, wending their way, "not creeping unwillingly" but playing as they move, towards the school-house, a well-thatched mud or brick building, bright and well lit in the morning sunshine with white-washed walls, a well-kept enclosed garden and a playground, which attracts because therein children create things as well as learn them. In this picture, the school would be a radiating centre for the strivings, the hopes and ambitions of unborn generations of the village folk.

EXPERIMENTS IN RURAL SCHOOLS

TYPES OF RURAL SCHOOLS AND THEIR FUNCTION

Rural schools vary in size and efficiency, and the teaching is through the mother-tongue. There are, however, three main types of rural schools which are to be found in all parts of India. There is first the preparatory school which provides a three years' course for very young children, normally between the ages of 6 to 9 years. The preparatory school is simple in organisation and is either a single teacher or two teachers' school. The primary school provides a five years' course in the three R's, geography and physical training. The preparatory or primary school is a co-educational institution, although the number of girls reading in it is at present negligible. The middle school for boys provides a further three years' course, for pupils between the ages of 11 or 12 to 15 years, leading to a public examination and the Vernacular Final Certificate. The middle schools are not co-educational, and there are practically no rural middle schools for girls.

In this organisation, the preparatory school is a sort of half-way house to literacy, which has failed in its purpose. The primary school marks the full stage of primary or elementary education that ensures lasting literacy. The middle school has lured the village boy as an avenue of escape from his rural occupations. The natural outlet for the certificated villager has been so far the teaching profession. The more enterprising and intelligent village boy has also joined the High School in an urban centre and thereafter a university. Existence in an Indian village is so wretched that educated young men from the village

are constantly trying to escape, instead of attempting the difficult work of rural reconstruction in order to make that existence more tolerable. The desire of escape is overmastering; it can never be entirely eradicated. It is not confined to India and is a disease of modern civilisation. Excessive overcrowding of the learned professions and sheer economic pressure are now compelling these certificated young villagers to stay at home. In the village, there is no rural work that they would consider congenial. Consequent idleness is the source of much misery to themselves and to others.

The tasks for rural schools therefore are to make literate, as quickly as possible, the vast population living in the countryside; to secure opportunity for higher education for the more talented and ambitious youth of the village, and yet to conserve and reconstruct the essentials of his rural upbringing so that he may not subsequently find his life uprooted from his environment. To ensure the last result the process of ruralisation of rural schools that has apparently been neglected, cannot, without danger, be deferred until the schools have adequately fulfilled their other functions. These are unquestionably the primary functions of rural schools, but not *ab extra*. The schools have a background of rural life which should be reflected in their work, if they are to be truly rural.

RURAL LIFE

Rural life in an Indian village for a vast population of its inhabitants consists mainly in the effort to eke out a bare subsistence from the land whose productivity is diminishing through excessive pressure of population. Such meagre living as the villager can make from agriculture does not occupy him continuously throughout the year. He needs subsidiary occupations for idle hours, and sometimes through a

simple handicraft like rope or basket or mat making or similar handwork he supplements his scanty income. The means of livelihood in a village are therefore agriculture and subsidiary handicraft, and this is the background that the rural schools must in some measure reflect in their organisation and work. The result of some experiments in rural schools is stated below.

SCHOOL GARDENS AND RURAL KNOWLEDGE

Education departments have realised, though rather late, the need of agricultural education in the middle schools situated in rural areas; they have framed courses in agriculture and syllabuses in rural knowledge which have been introduced in a few schools. This development has now been arrested owing to insufficiency of funds for starting agricultural or rural knowledge courses in all rural middle schools and for training teachers. Until a regular farm is attached to each school and formal courses in agriculture or rural knowledge are introduced, the simpler experiment of requiring the staff and students of each middle school to maintain a fruit, flower and vegetable garden has been tried with success. Where land is plentiful and a well is available for irrigation, quite extensive gardens have been planted and improved through the co-operation of teachers and boys, rivalling in size and efficiency the farms maintained under formal courses of agriculture. The zeal of the inspecting staff and the energy of the head teacher can achieve success even under adverse conditions, such as lack of sufficient land and water, depredations of stray cattle and the apathy of the village folk. Land has sometimes been "wangled" as a gift, water for irrigation has to be brought from a distant well or pond by teachers and pupils, involving much effort and waste of time and enclosures are constructed from bamboos cut down from the village grove or by planting a hedge of some sort. As a practical programme of

agricultural education in rural schools, the maintenance of the school garden (distinguished from a farm attached to a middle school as part of a formal course in agriculture) requires more strenuous efforts and has high educative value, since the difficulties involved are not unlike those met by adult folk in village husbandry. The school garden costs practically nothing to plant and maintain in a village. It may be admitted that the maintenance of a school garden has always been considered a praiseworthy effort. There is, however, a world of difference between a pious wish of this character and a practical programme of encouraging school gardens through propaganda and concerted effort. Formal courses in agriculture have been framed and introduced in some rural middle schools and there is a departmental examination in agriculture. It is, however, not practicable or desirable to make the teaching of agriculture in a primary school formal. A school garden in a village primary school is the laboratory through which pupils can be taught nature study in a practical way. Gardening has been so far the Cinderella of subjects taught in rural schools. For its intrinsic value in rural life as being allied to the industry of agriculture, and for its psychological value as manual activity and part of nature study, a school garden should become an essential feature of every rural school. The educational authorities maintaining and controlling village schools should afford necessary facilities by giving land and digging wells. Teachers and boys pick up the work readily. The staff should preferably be instructed at a training or normal school in rural knowledge and farming; even without such training school gardens can and have been maintained with success through the propaganda and enthusiasm of the inspecting staff and the co-operation of head masters and teachers. Such concerted effort was made in some hundreds of rural preparatory, primary and middle schools scattered over a wide area in the

Benares division and elsewhere and was rewarded by an appreciable measure of success. School gardens were planted, improved and extended and great ingenuity was exercised in overcoming obstacles which varied from place to place. Initial success is encouraging, but the more difficult task ahead is how this work can be consolidated and maintained. Even a slight relaxation of effort on the part of the inspecting and school staff would undo the progress made in school gardening. The vegetable and other produce of a garden for the use of the staff and pupils is certainly some inducement for its maintenance; it is to be hoped that in time it may prove an adequate incentive for continued hard work for a prolonged period.

HANDICRAFT IN RURAL MIDDLE SCHOOLS

In 31 rural middle schools in the U. P. woodwork or carpentry classes have been opened and the subject has been introduced as an optional course for the Vernacular Final Certificate examination based on a syllabus framed by the Education Department. These woodwork classes require a working room and benches and tools and are expensive to open and maintain. It is desirable to start them in country towns (as they have actually been opened in some cases) and not in the interior of rural areas. Woodwork is not so popular as the agricultural course and its relation to rural life, as allied to the subsidiary craft of the village, is less apparent to the villager. Even so there are many rural middle schools at suitable centres in which these carpentry classes need to be attached, if funds would permit such development. There is, however, not much hope of money being available for the purpose in the near future. Handicraft, in the form of actual subsidiary occupations of the village could, on the other hand, be developed in rural middle schools without waiting for the opening of woodwork classes in these schools. It has been introduced, with considerable success,

in many schools of the Benares division and elsewhere and has proved that such handwork is practicable and involves little or no expenditure. Observation of the simpler subsidiary occupations of rural life shows that such articles of common use as rope for drawing water from the well, small mats or fans made out of twigs of palm or date-palm trees or bamboos, coarse cloth pieces, and baskets made out of whatever material is available, are what the villager needs and makes during hours which he, his children and womenfolk can spare from agriculture and care of cattle. The articles mentioned are only a few of the things—which vary according to local needs in different parts of India—that the rural household requires for common use and makes out of material to be found in and round about the village. These miniature cottage industries are as various as the variety of climate and circumstance to be met in the vast countryside of India and the raw material of this handicraft is anything and everything that the ingenuity of the village folk can use to some purpose, from raw cotton and jute to species of grass. They are inexpensive, require no elaborate tools or equipment, their psychological value as a corrective of the too literary character of education is obvious, they derive meaning, as previously stated, which is apparent to the boy and his parent, from the rural craft of the environment and have in some cases, been made productive and profitable to the school. For instance, scholars had to sit on bare floors in a number of schools. They wove their own mats, from whatever material was available, for their personal use. Following on or interspersed with the work of the curriculum for the Vernacular Final Certificate, manual occupations are inherently interesting to the pupils as a welcome break from the monotony of the grind for the examination. If the teacher, as a villager, has ever worked at a craft, he would be able to get better results from his boys, but

even if he has had no experience of the kind, his appeal to the play or constructive instinct of the children is sufficient to start them on such handwork, and continued encouragement ensures success. This statement is based on the observation of the teachers' work in over 100 rural middle schools scattered over the area of a division of five districts. The head master of a middle school who had made a success of the scheme of handwork in his school was asked how his boys had learnt to work so well. The reply was that in the beginning the pupils were slow and inept at the craft but that the observation of similar work at their home or village, and occasional help from a village craftsman made them efficient at it in a very short time. One criticism can be made that there is no apparent need for the inclusion of such craft, easily required in later life, in the business of education, especially when the curriculum of the middle school is becoming overweighted. This curriculum of studies including physical exercises is taught for five and a half hours daily. If gardening and subsidiary village craft are taught as handwork for an additional half an hour per day, the extra half-hour devoted to such activity can obviously be justified on account of the intrinsic value of these occupations in rural economy and on psychological grounds. The raw material for the craft, cotton or jute or bamboo or species of twigs and grass, is available in the home or village of the pupils who are generally required to bring the material out of which they make the finished article in school and take it home. To ensure a regular supply of material the expedient of advancing a sum of Rs. 4 or 5 from the recreation fund to the head master as a temporary loan has been tried. The head master is required to get his school to make and sell articles of common use in the village sufficient in number to enable him to repay the loan.

VILLAGE HANDICRAFT IN RURAL PRIMARY SCHOOLS

Subsidiary village craft, graduated to suit the age and capacity of young children, has also been introduced in about 3000 rural preparatory and primary schools scattered in seven districts of the Benares Circle. More time has been devoted to handwork in these schools so as to provide scope for young pupils' activity in play and constructiveness. After the tuitional work is done, considerable time is left over which the teachers do not know how to employ usefully to develop the innate powers of children. Village handicraft will, therefore, not only appeal to scholars' instincts of constructiveness and play but will also be based on the needs of the village. As in middle schools, the handwork is inexpensive, very simple to learn, useful and profitable.

In the preparatory section or school, the period of actual teaching of the three R's should not exceed four and a half hours of each working day. In the primary section, tuition in the literary subjects of the curriculum should not exceed five hours. Neither rules nor common sense permit longer hours to be devoted to teaching. Excessive grind is harmful alike to the brain and body of children. In actual practice, however, the school hours are from 10 A.M. to 4 P.M. or 8-11 A.M. and 1-4 P.M., except in summer when the school is held in the morning from 7-11 or 11-30 A.M. As the primary schools do not keep time by watches or clocks, which are not supplied to them (instead the majority of schools have now constructed a sundial), children have sometimes been detained in school for more than six hours. The explanation given by head and assistant teachers of preparatory and primary schools for such long hours of detention of children in school is that the village folk prefer their children to be kept in school for at least six hours, so that the mother may be left free to

do household work and also because of the persistence of the old-fashioned belief that long hours of school work necessarily mean effective instruction. If a child reading in the infants' class or class I, who coming to school at 10 A.M. is given leave at say 2 P.M., the parents would probably consider the child's early return home a nuisance and feel dissatisfied with the school for doing less teaching than it ought. If, therefore, children are to remain in school ordinarily for six or more hours a day it is essential that the school should become a place of many-sided activity which will keep the child engaged at tasks that appeal to his natural interests. He will learn to read, write and calculate more rapidly and quite effectively, if instruction in school is not confined merely to reading, writing and arithmetic. Suitable handwork will provide that play-way method of instruction that lessens the strain of teaching on the teacher and of learning on the taught. Handicraft is also intrinsically valuable for children, since it trains hand and eye. A proper combination of literary instruction and village handicraft will therefore prove an effective curriculum for rural primary schools. With necessary elasticity, such a curriculum will meet the needs of all primary schools.

In the infants' class clay-modelling provides suitable handwork and has been tried with success. Potter's clay is easily available in the village and young children, between intervals of learning their letters or figures, find it an interesting occupation to make small clay-balls for counting and play. Children should not, however, be kept for too long a period at the task of making small balls. They soon tire of clay-modelling if they are not permitted to fashion interesting things, such as familiar objects, birds, animals, etc., out of clay. If a better kind of clay is used, it washes easily, and messing about with clay should not certainly be

the excuse for untidiness among children. In a few schools paper-cutting has also been attempted; clay-modelling has been more widespread.

In classes I and II the children are old enough to do more advanced handwork than clay-modelling. They have been set to the task of making jute yarn (string or "sutli") and cotton yarn on simple spindles made of wood or metal. As they twist the yarn from jute or cotton or some species of grass or whatever material grows in the village or is otherwise easily available, they sing or recite poems out of their text or prayer books. Their hands as well as vocal chords are busy, and they take a strange delight in this simple handwork accompanied by song or recitation. After a quarter or half an hour of this work they turn more readily to their reading and writing, and the school-teacher's work is lightened as he has no longer to teach a lot of sleepy children tired out by conning over their books or bending over their "takhtis". This kind of handwork is so simple that the children have only to be set to learn it. They learn to spin and twist the material by themselves with a little practice. And further practice makes them perfect. String ("sutli") and yarn are, moreover, of common use in every village household and mothers have begun to value their children's activity in school.

In classes III and IV, more advanced handwork is done, such as weaving mats out of the leaves of palm or date-palm or other trees and making bamboo baskets or "chiks". Where bamboo is not available another suitable material is used. Weaving of mats has proved a model object lesson in self-help; for children now no longer sit on bare dirty floors. The district boards are supposed to supply "tats" to their schools to seat school children. For want of funds, the supply of "tats" is very meagre, and in weaving their own mats

the children have learnt to make good the deficiency in school equipment. The shortage of "tats" supplied has led to the most interesting development of manual activity in the two top classes of primary schools and in middle schools. Twisted string can be turned to account in making ropes for drawing water from wells and further, it is the material for making 'tat' pieces which are supplied to schools for seating scholars. Advanced instruction in handwork has been directed to making these 'tat' pieces out of the string which the children have learnt to twist in classes I and II. Many middle schools and some primary schools have made 'tats' during the school periods assigned for handicraft and the boards have been asked to purchase the 'tats' (they have proved to be quite superior in quality) made by schools. The small profits of this industry—if education committees help in the matter—will form the nucleus, in each school, of a capital fund which will be used for the supply of raw material required for handicraft in school and will enable each school to develop a self-supporting miniature cottage industry of its own.

As in middle schools small loans of Rs. 2 to Rs. 5 have been advanced, according to the size of the institution, until each primary school has accumulated a fund of its own for the purpose, so that the staff and scholars may carry on the handicraft and repay at the end of six months or a year, the advance from the sale proceeds.

PRINCIPLES OF VILLAGE AND SCHOOL HANDICRAFTS

In the scheme of village handicraft introduced in rural schools, certain principles have been kept in view: the scheme has been so framed as to be graduated and self-developing throughout. Clay-modelling is done in the infants' class, potter's or other clay is easily

available in the village. In classes I and II children spin yarn, or twine or string out of cotton and jute or some species of grass, which are grown as crops, on small wooden spindles which are easily made. In the preparatory schools handwork seldom goes beyond this stage. In the two advanced years of the primary school, scholars weave mats, make ropes or baskets and do cot-weaving with jute string. The material spun in the preparatory stage is by a natural development turned to use in making simple articles like a rope or a primitive bedstead in the primary classes. In the middle school, the jute string is woven into long thin pieces of stout matting three of which when sewn up make the 'tat' which is used so widely to seat scholars in rural schools. It has been arranged with education committees of boards that they will buy up the 'tat' made by schoolboys for use in their own school. By a natural sequence, the raw material grown in the village has passed into a finished article for which a permanent market has been found in the school itself. Similarly cotton yarn can be made into school dusters. In middle schools other advanced work is also done, such as weaving 'niwar', a process similar to 'tat' making, which can be sold in the village for weaving superior bedsteads; and better quality of mats, baskets and bamboo strip curtains are made.

Another principle of village school craft is that it must be entirely self-supporting. Funds cannot be spared for a development of this character in hundreds of middle schools and thousands of primary schools. Moreover, the villager, who is shrewd in such matters, should not be led to expect a *free* supply of raw material as part of such tuition. He will not then consider it necessary to contribute anything to the miniature cottage industry in school whose product he will demand as a return for his child's labour. The aim, in fact, is that besides

its educational value, school craft should become slightly profitable. For then the school child will learn, from early years, to realise his own powers as a productive agent in rural economy. This would in some slight measure relieve unemployment in the village, especially among those who have come out of rural schools, and predispose them to practical pursuits.

Other points of the scheme of village school craft are that, while the teacher's aptitude at handicraft is valuable, no elaborate or specialised training is required and from among the variety of village crafts the simplest have been transplanted into schools. Moreover, experience has proved that in a surprisingly short time scholars acquire such skill in handwork that the finished article is sometimes indistinguishable from that produced by professionals. The schools have been required to aim at a high standard of excellence and not to be content with amateurish execution.

A very important principle of school gardening and craft introduced in rural school is *integration*. In the experiments which have been tried the work of gardening and school craft has been interspersed or combined with an intensive programme of improvement of tuition, methods of teaching, singing and recitation, physical training and scouting. Such emphasis on general efficiency of schools has the merit of giving due weight to every activity of the school and prevents the village teacher from converting school gardening and craft into a 'stunt'. Experience has also shown that more attention given to scouting and physical exercises helps indirectly the scheme of gardening and craft in rural schools. The inspecting staff from the Inspector downwards also hold demonstrations in handicraft and physical exercises for groups of schools at convenient centres as part of inspection work. The demonstration serves the purpose of propaganda and

illustration of underlying principles for backward or ignorant teachers and acts, through its competitive character, as an incentive to keen teachers to maintain and improve their standards. This three-fold integration of work, namely, school gardening and craft, tuition and physical training and scouting is in the nature of a many-sided programme for a general improvement of conditions in rural schools. Its many-sidedness generates a greater momentum than the development of gardening and craft would, if they stood alone.

TRAINING OF TEACHERS IN VILLAGE AND SCHOOL CRAFT

Although the scheme of handicraft introduced in rural schools requires no specialist training of teachers, an attempt has also been made so to train primary school teachers that they may participate effectively in the handicrafts which have been found to appeal so strongly to children's instincts and interests. The training of teachers on these lines has involved no expenditure and no fresh organisation. The existing training and central training schools prepare candidates, during a course extending for a period of ten months, for the primary teachers' certificate. Nature study is one of the subjects taught in training schools. Gardening and some farm-work were developed in central training schools as part of nature study and as a necessary professional equipment of a village teacher. The Education Department have now introduced formal courses in rural knowledge in government central training schools. Other central training schools will in course of time introduce the formal course. Half an hour each day has been allotted in the timetable of central training schools for pupil teachers to practise the village handicraft described above. A

notable success in training primary school teachers for the spread of the programme of general efficiency in rural primary schools has been achieved by organising special refresher courses, lasting for a period of five or six weeks at the end of April and during May, just after the Primary Teachers' Certificate examination is over. Thirty teachers, preferably below 40 years of age, who obtained their Primary Teachers' Certificate in previous years and who have been teaching in primary schools are made to attend the refresher course. *The course provides intensive training in modern methods of teaching infants and physical instruction, gardening and village handicrafts.* It is not surprising to find that the primary school teacher needs a periodical refresher course to prevent him from falling into dull routine. The work of these thirty teachers in their schools is taken over by the batch of thirty pupil teachers who have completed their course for the Primary Teachers' Certificate and appeared in the examination for the course. They usually get a monthly stipend from the boards during the whole session in which they undergo training and they are therefore required to teach in the primary schools whose teachers have been deputed to attend the refresher course. There is no expenditure, beyond the travelling expenses of teachers attending the refresher course which come to a small amount and are met by local boards. The successful features of refresher courses at central training schools are the organisation of work into the morning and afternoon periods, 6-10 or 10-30 A.M. with half an hour's break and 4-30-6-30 P.M. on each working day. From 6-6-30 A.M. teachers do physical training and learn physical instruction; from 7-10 A.M. general methods and practice of teaching, especially in the infants' class, are taken up. The afternoon period is devoted to gardening, handicraft, singing and recitation and where facilities are

available the teachers finish a good summer day's work with a swim in a river. The chief difficulty of the refresher course is the short period of the course during which to complete the objectives set forth above. The refresher course in the second year proved a distinct improvement on the course of the previous year. Teachers are also now eager to undergo the course. The proposed award of a certificate for attending and completing the refresher course will stimulate their keenness. It should not be difficult to organise similar refresher courses in normal schools.

These experiments have demonstrated the fact that with the existing organisation and little expenditure, it is possible to ruralise our rural schools and to raise their level of efficiency in physical and general instruction.

OTHER EXPERIMENTS IN RURAL SCHOOLS

Since the printing and publication of the previous study as a pamphlet by the United Provinces Education Department in 1932, a few enquiries have been made, by people interested in the education and the welfare of the village folk, concerning the ways and means of introducing the activities described therein into the schools. It is, therefore, necessary to elucidate further the method of conducting the experiments, before giving an account of other experiments that have since been tried in rural and urban primary and middle schools.

First as to ways. As between the mode of starting the activities simultaneously in as large a number of schools as possible and of concentrating on one or two schools which are selected as a sort of laboratory for the testing of these experiments, the former method is not only to be preferred but is essential for success in the village middle and primary schools. The number of these schools is so large, and the needs of the countryside are so pressing that they demand an immediate reform in education. Actual practical experience in the schools of the Benares Circle have demonstrated the vitality, consequently the possibilities of the method of extensive experimentation. The method of localised experimentation is like the flickering rays of a newly lighted candle which are ultimately to serve as the beacon-light dispelling darkness far and wide; the former is like a lighted flame catching a hayrick so that it spreads like the prairie fire. Again, the concentration

experiment is like the intensive garden farming of overcrowded, industrial centres, and the extensive programme is the broadcasting of the seed over a vast area of land in the hope that it will germinate through the vitality of the soil and its own vigour without over-careful tending or close supervision. This strong faith in the possibilities of extensive experimentation in middle and primary schools, rests mainly on two grounds.

Firstly, when the schools that have to be vitalised by a practical scheme or programme of education are reckoned in thousands and tens of thousands, the new ideas must be charged with their own momentum so that they may easily permeate education. The practice embodying them should, therefore, be broadcasted in the schools. The spread of boy-scouting illustrates the method of extension. Secondly it is less costly. For if the activities are to spread easily and quickly, they must be inexpensive. The tendency in the laboratory method of concentration is to perfect details and to test ideas laboriously, which makes it more costly in practice. Care may be taken to make the method inexpensive even when it is conducted in one or two selected schools. But in spite of this care, the normal conditions of an average school cannot, from the nature of things, be reproduced. The school selected to serve as the laboratory for conducting the experiments is generally a good school, a model school, and material is made easily available; whereas in a municipal or district middle or primary school even simple appliances and equipment of instruction are not adequate. The staff and the pupils have to exercise their ingenuity in all sorts of ways (as for instance in school gardening) to discover as well as to make things. *The school, as a unit, has in respect of these efforts, to function as its own provider and its own architect.* In the majority of rural

middle and primary schools, there is a games or recreation fund, raised by a very small monthly contribution from pupils. Loans and advances from this fund finance school enterprises. The conservation, not the dissipation, of the slender resources of the school should be the aim; the school will then only be able to function in its dual capacity of provider and architect. This elucidates the question of means.

In favour of experimentation localised at a training institution, it could be urged that arts, crafts, gardening and agriculture will spread in primary and middle schools when the teachers and district inspecting officers have been trained in the ideas and practice of educational handwork. An essential requirement, however, is that they should first become imbued with a faith in and missionary zeal for reform in rural education. For this vital purpose, extensive experimentation is the most effective method. Training of teachers in village handicrafts, as part of educational handwork, is supplementary to the process of their conversion to the new creed of reform. Further, experiments should preferably be conducted at more than one training institution and since there is a large number of such institutions, the training of teachers will also develop into extensive experimentation. Other reasons for the advocacy of a widespread programme in middle and primary schools are that while the schools have to contend against the dead-weight of a tradition of purely literary instruction, they respond readily to efforts of adjustment being smaller in size (than the high schools), simple in organisation and not inelastic in respect of curricula. As units, they possess a certain measure of fluidity which makes the introduction of gardening and crafts easy. The danger is that the fluidity of the school may also spell impermanence of the reforms made in rural education. The remedy is, firstly, to make

'gardening and crafts' a compulsory* subject in the curricula of rural middle and primary schools; the village school teacher is guided by the prescribed syllabus. Secondly, once the garden and the 'crafts' take root as an integral part of the regular school work, they will thrive on their inherent vitality and will not be easily uprooted. Thirdly, constant vigilance of the inspecting staff is required, at least in the infancy of the process of assimilation. A determined drive must be made by the inspecting officers to overcome the conservatism and inertia of the village school teacher when he is faced with the task of reform in rural education. One thing that has proved helpful in the process of reform is to supply a *printed time-table* to each school. This time-table should prescribe on each day of the week periods (the duration of each, with suitable short breaks and a longer recess) for different studies including gardening, crafts, playway methods of instruction, recitation and singing, local games and scouting and physical exercises. There are well-considered reasons for the suggestion that each rural middle and primary school (and as the experiments have also been introduced in urban middle and primary schools, these institutions have also had to follow a similar time-table framed for them) should possess a time-table framed for it by a central educational authority of the district or the division and that it should be printed. The task of framing a time-table should not be left either to the head teacher of a middle or a primary school or even to the immediate inspecting officer of that school. Head teachers, left to themselves, generally allot two and even three successive periods to the teaching of arithmetic and

* After this was written, Handwork has been made a compulsory subject in middle schools and an optional subject in primary schools in the U. P.

an inordinate amount of time to dictation, in primary schools. In middle schools, months before the approach of the Vernacular Final examination, the staff start the daily grind of coaching and the scholars (of class VII) of cramming, at 4 A.M. and it ends at 10 P.M. There are short breaks for meals, none for physical exercises, scouting and games or any other extra-curricular activity. The distribution of the whole day's work follows no plan or time-table. Three hours of the early morning, when the pupils are fresh, are spent over arithmetic and geometry; the rest of the day in cramming the subject matter of the history, the geography and the language text-books. In the two lower classes V and VI of the middle school, the head teacher generally leaves the pupils and the class-teachers to their own devices. In some primary schools, the head teacher and the staff follow no set time-table and should perchance an inspecting officer drop in, the teachers have a ready recourse to the teaching of mental arithmetic or the giving of oral dictation. These two tasks have been the perpetual burden of pupils' lives in the primary schools; the extra-curricular occupations have sought to bring relief and some measure of joyful activity. The time-table should be a printed sheet supplied from the district education office because the matter dictated to the head teacher by the inspecting officer becomes confused and messy when copied out, and moreover the number of schools is so large that much time and energy will be wasted in the dictation of a time-table. The idea underlying a time-table framed and printed by a divisional or district educational authority is that every primary and middle school teacher should know explicitly what subject he is required to teach in every period of each day in the week. This pointedness and exactitude in the distribution of time and the division of the many-sided programme

of work may lead him to evolve some sort of order and sensible routine, which are generally lacking, in his methods of teaching and class and school management. Such rigidity is open to criticism in theory. Some years ago, a President of the Board of Education was ironically reputed to have known, from a time-table sheet on the walls of his office, what every child in every school in England was doing at a particular hour of the working day. Elasticity and decentralisation in such matters are possible only when a country's educational organisation has developed a certain measure of stability. Such a stage has been attained in high schools and English secondary education in India but not in those middle and primary schools where instruction is given through the mother-tongue. The following facts will illustrate the cogency of the ways and means advocated for the many-sided reform in rural education.

The experiments described in the previous study were started in July 1930 in the district board schools of the Benares division which comprises the five districts of Benares, Mirzapur, Jaunpur, Ghazipur and Ballia. They spread slowly because many village school teachers professed ignorance of the new programme of work which was communicated and demonstrated to them through the district inspecting staff. In July 1931 a printed time-table sheet was supplied to each school so that no teacher could plead lack of knowledge as to what he was required to do. By the end of the year 1931, the programme was working vigorously in the rural (and even urban) schools of the Benares division. As a measure of economy three divisional inspectorates of schools were abolished by the U. P. Government; in March 1932 the two districts of Azamgarh and Partabgarh were, in the redistribution of districts to form circles of educational administration, amalgamated with the five districts of the Benares division. In a

period of less than six months from this date, and virtually from the beginning of the next school session in July 1932, the educational programme of crafts and gardening was introduced successfully in the rural schools of the two districts of Azamgarh and Partabgarh also. It spread quickly by the mode of extensive experimentation, with the aid of a printed time-table sheet provided in each school and by instructions and demonstrations given to the inspecting staff of each district. During the year July 1930 to July 1931, the work had spread slowly in the schools of the Benares division; not so in the schools of the Azamgarh and Partabgarh districts during 1932 and in the municipal schools of Benares (introduced in the later half of 1933) where it was initiated with ease and rapidity. Other ways that have been adopted to propagate the new ideas and, through them, to initiate reform, not only in education but in other fields of rural welfare-work are considered and discussed in the study on the Education Week.

Other forms of cottage industry that have developed in some middle and primary schools through the impetus of the scheme of education which includes handicrafts and gardening, are carpet and coarse-wool blanket weaving, fruit culture and country soap-making. As and when the programme of many-sided activities in the rural schools gathers momentum, other crafts and occupations suitable for adoption in the schools will be discovered and practised. *There are three criteria that the school industry should satisfy. It must be educative, assimilative and economical.* To be educative it must stimulate the child's intellect, otherwise its proper place is a workshop or a technical institute, and not the school. Gardening is highly educative; pottery is good for young and even older children, since it teaches the sense of form in a concrete way. So also cane-work, spinning and weaving of different material not only produce

manual dexterity but train the hand and the eye as well. When suitably interposed at intervals between prolonged periods of intellectual effort, all these occupations recuperate the mind. There are other crafts such as shoe-making and leather work, smithy and button manufacture which are neither equally educative nor otherwise suitable for school industry. To be assimilative it must be of such a nature that it could be easily integrated into the studies of the school and its extra-curricular activities such as physical instruction, games, scouting, swimming, singing, signalling and Red Cross work. Therefore the handicraft must be simple in technique and its requirements; its mastery by pupils and teachers should not be too difficult, or they would neither have the time nor the patience to practise it; and it should be workable in the short period of half to one hour a day. The third criterion of economy seems obvious. It is not merely thrift because funds are scarce. A craft may be educative, may train hand and eye, may require little or no equipment, but if its product is such that it cannot be sold or does not yield a margin of profit, ultimately the children and the teachers are bound to get discouraged when they do not reap the fruit of their enterprise in some tangible return. In this sense, school handwork may prove wasteful of energy and time, although it may be economical in expenditure. Educative values and hand and eye training will not be considered adequate gains to maintain and extend the school industry of this peculiar nature in which the funds as well as the enterprise are supplied jointly by the staff and the scholars without financial help from any educational authority. It is, therefore, wiser to insist that even the school garden should be a vegetable as well as a flower garden. The economy aimed at is therefore threefold, of energy, of time and of money; for this purpose *the output of*

school crafts should be marketable. The choice of these crafts has, therefore, to be made with discrimination and after a study of the wants, the modes of life and the habits of the local people.

The crafts mentioned at the beginning of the previous paragraph are being practised in certain schools and spreading to other schools because they are suitable for these institutions. Their suitability can be tested by the above criteria. In and round about the district of Mirzapur the carpet industry is still flourishing. It has not, therefore, proved difficult to start it in some of the local schools. Some of the teachers either knew or have since learnt the craft. In a number of middle schools, weaving of carpets of a superior quality is now regularly done by the pupils under the instruction of their teachers. No costly plant is required, simple material and tools are all that the schools need. In other districts, as for instance in Azamgarh, the carpet is woven from coarser material and the quality is inferior, but it will meet the local needs. So also coarse-wool blankets find a ready sale in the countryside owing to their low cost and the poverty of the people. The weaving of carpet and coarse-wool blankets have been extensions of the 'niwar' and 'tat' making mentioned in the previous study. The processes and the plant—both very simple—of all these crafts, are similar in nature; and if weaving is considered educative, they are developed forms of this occupation. The operations for starting and breaking off work in these handicrafts involves no waste of time, they can therefore be easily included in the school time-table. Fruit culture has been a natural development of gardening. In a number of school gardens, banana and papaya trees have been planted; and other schools are required to plant lemon trees, so that lemon juice may be made available to savour the sprouting gram now provided for pupils

in all middle and some primary schools. In one middle school of the Benares and one in the Azamgarh district the headmaster has shown exceptional enterprise by planting all available variety of fruit trees, such as apple, pear, guava, papaya, lemon, plum, orange, banana, etc. These fruit trees have grown as saplings during the period of less than a year, and the pupils are learning grafting and fruit culture. Each headmaster has considered local requirements, and the possibility of fruit-culture as an industry which will develop in the area in which his school is situated. Again, in a few schools of certain districts, the sale of flowers from the school garden has been found practicable. These are a few of the possibilities of the school industry of flower and vegetable gardening and fruit culture.

Country soap-making was spontaneously started by the head teacher and the staff of a primary school in one district; it is now spreading slowly to other schools and districts also. The headmaster discovered that the process was simple, the material easily available and the soap made was readily purchased by the village folk. He experimented with the process, by varying the proportions of oil and caustic soda, and succeeded in making a fair quality of soap. Besides the possibility of washing-soap becoming a self-supporting school industry,* it has the important advantage that village pupils will learn to wash their clothes regularly and to keep clean. Any one who has seen the pupils of village schools (as well as of municipal schools) in India has invariably noticed the dirty, dust-stained state of the children's clothing. Further, the environment in and outside the school, the village (its roads) and the home

* The great difficulty of this suggestion is real; it can be overcome by the development and strengthening of a crafts department in every training institution.

of the children is so filled by dirt and dust during summer and winter, and by mud during the rains, that even elementary cleanliness of person and clothing enjoined on the pupils and the teachers, seems a counsel of perfection. The person enjoining such cleanliness should in fairness, if he knows the conditions of the village and the school, also indicate how it could be maintained. The soap made in school would provide a simple means by which the dust and the dirt of the children could be washed away regularly and periodically, if the teachers could be induced to interest themselves in the ways and means of cleanliness that soap-making has revealed. The spread of soap-making requires certain precautions. The soap made should be used only for washing clothes and the quality of soap would have to be improved. Improvised soap cannot be used as bath soap, as the alkali constituent in it may damage the skin. Moreover soap-making in schools presents greater difficulties than the other crafts that have been practised so far. The Department of Public Health aim at propagating the lessons of health, hygiene and sanitation, in and through the school; they would find that if they lend their aid to soap-making as a school industry, universal cleanliness of clothing of village school children would no longer remain an unrealised and impracticable ideal.

An interesting consideration concerning the crafts discussed in this and the previous study is that they will not be liable to periodical crises (like the world commerce and industry), since there would be no over-production. As school occupations, they will be miniature cottage industries which may yield a bare margin of profit, since the school child labour is available, but being worked for not more than one hour daily, they could not possibly lead to an excessive supply. For similar reasons, they will not deprive the village or town craftsman of his living. In no sense are they, during the

school life of the child, whole-time occupations.

A word of warning is necessary: the "crafts and gardening" scheme of education described in this and the previous study has been worked out in primary and middle schools wherein only children whose ages do not ordinarily exceed 15 years are instructed. It should not be introduced unthinkingly in adult schools, whether rural or urban, without careful consideration and modification. Adult schools are generally night schools, held for two hours, and their principal business is to instruct the grown-up town or village worker in reading, writing and simple calculation, to make his life of toil less mechanical by cultivating his intelligence and to point out a way for better living through temperance (sobriety), scouting, singing and social activities. The aims of adult education are distinct from those of child education. The capacities to be instructed are in a different stage of development. The adult has learnt to work with his hands. He is a fully developed manual worker, within the limits of his manipulative skill. The uninstructed adult's first need is therefore the awakening of his mental faculties. On the other hand, the cultivation of all the potential capacities of the child, intellectual, manipulative, artistic, emotional and spiritual, is the task of the school. It follows that the experiments described in these two studies have essentially no place in adult education. It is possible that some of them could be utilised with discrimination for the instruction of adults also.

So far the mode of extensive experimentation has been considered in relation to only one type of school reform, namely, the ruralisation of the rural school by making "the actual teaching in the village school adapted to the needs of village life". The method has, however, been found to be effective in another difficult task of the school also. There is no provision for any sort

of musical training in rural primary and middle schools. Vocal music, chorus singing and recitation of prayers have nevertheless been sought to be improved by determined and widespread efforts. Hitherto because teachers' attention was not directed to an appreciation of music, the prayers sung by children, at the commencement of the school day, provided no 'harmony which could soothe the spirit and attune the mind to quietness and peace for the day's work. Through persistent pressure and persuasion, one or more enterprising teachers on the staff of many schools have now learnt to conduct pupils' prayers and choral singing in tuneful harmony. They have thereby pointed out a possible way to leaven secular education with the ferment of the religious spirit. Moreover through vocal music a partial education of the emotions has been provided for large masses of young children. A repertory of hymns and prayers in praise and on the glory of God, universal to all religions, now exists which each child can sing irrespective of his creed and denomination. Half-an-hour's practice, each morning before commencement of the school, in the choral service of these hymns will provide the rudiments of religious education, the lack of which is considered by many to be the pronounced weakness of the Indian education of today.

ECONOMICS OF VILLAGE SCHOOL GARDENING, FARMING AND HANDICRAFTS

In the two previous studies the introduction of a widespread educational programme of agriculture, gardening and handicrafts (to be called "agriculture and crafts") in rural primary and middle schools has been advocated. There are many aspects of this programme, including its adjustment and extension to the needs of urban schools. Experiments in high schools are discussed in a subsequent study. One important consideration, as it affects the advocacy for introducing agriculture, gardening and crafts in village primary and middle schools, is here discussed, even at the risk of some repetition.

What is to be the economic basis for introducing, on as wide a scale as practicable, gardening, agriculture and handicrafts in rural primary and middle schools? The provincial governments and local boards are notoriously short of funds. Even if the hope is entertained that they will become more prosperous than they are at present, one would have to be very optimistic to believe that there is any prospect of a margin of funds being available for the introduction of agriculture and crafts in primary schools and in all middle schools, after other clamant needs have been met. Construction of school buildings, their equipment and introduction of compulsory primary education for girls as well as boys will first eat up funds, even if they could be made available for rural education. This school reform cannot

and should not therefore wait for the provision of funds.

It follows that, at least in the near future, if arts, crafts, gardening and agriculture are to flourish in rural primary and middle schools (and where possible in urban schools) they should be made self-dependent and self-supporting. The school industry and agriculture should create and maintain a School Fund which would develop the crafts and make their continued existence possible. In respect of such activities, the village school will become the proverbial architect of its own fortunes.

The ways and means for this purpose are considered below. They are not exhaustive and are considered in the order of their simplicity and practicability and not of their importance as crafts or educational hand-work.

'Tat' weaving in village schools has proved both popular and productive. It is a simple occupation, easy to learn and work. Its merit for school industry lies in the fact that the education committees of boards which are responsible for rural education have to equip their schools with "tat pattis" for seating pupils. The education committees or their chairmen generally purchase these pieces of "tat" from contractors. Part of this supply can be met by the pupils' efforts in schools, which must be encouraged by the education authorities which control them. The quality of "tat" woven by pupils is not inferior to that supplied by contractors; the quantity produced is not excessive. Primarily such handwork is an educative process, the aim is not purely profit. The advantage of this craft is that it can be made a recurring source for building up the School Fund; the danger is that if "tat" weaving becomes the only school industry it will fall into disrepute through its monotony. It will then cease to stimulate meaning or interest among the scholars and the staff as educational

handwork.

School gardening and agriculture can be made to yield a little income through the enterprise of the staff and the scholars. While the larger part of the product of school husbandry is quite legitimately consumed by the pupils and the teachers in the form of vegetables, it is not impossible to produce a surplus for sale. Fruit-grafting and fruit-culture and raising sugar-cane or fodder crops have been attempted in a few schools to build up the School Fund. Such enterprise is possible only where plentiful land and water-supply are available. Even primary schools can (after consumption) grow products for sale provided they have these facilities. The point here made is that should opportunities exist, without an avowed aim to produce a little money from school gardening and agriculture, these opportunities will be missed.

Spinning "sutli" and weaving dusters are simple occupations although less profitable. Other crafts which should provide variety in the occupation of 'tat' weaving are "niwar", silken colored cords, coarse-wool blanket and wick weaving. The processes of handwork are similar in all these occupations, the difference is that there may be difficulties in marketing "niwar", coarse-wool blanket, silken colored cord and wick. "Niwar" can be sold only when the quantity is adequate for one bed; while such a large quantity takes a long time to weave, it is more profitable.

Basket-work, such as is generally done by girls, could be made saleable. Weaving mats from palm or date-palm trees is useful for seating scholars in schools but there is no market for such articles in a village. The same consideration applies to the occupation of twisting a rope. Bamboo strip curtains are not easily saleable; but small square pieces of mats made out of "kusha" or other material can be sold. Artificial

flowers cut out of colored paper and paper work generally have not as yet proved marketable.

One primary school has made quite a profitable trade out of pottery. Birds, flowers and fruits made out of colored clay are regularly sold to passengers on railway trains which pass through the junction station close to which the school is situated. The quality of the work is gradually improving, through the ready sale of this school pottery.

In the ways and means, described above, for the building up of a School Fund for financing school industry and agriculture, it is not claimed that many or majority of schools have succeeded in creating such a fund. A few schools have undoubtedly done so, and thereby they have shown the possibility and practicality of the idea advocated here.

The creation of such a School Fund may be subjected to the criticism that it is a novel suggestion; because schools are not to be run like factories for profit. It is therefore necessary to repeat that even the little profit-making advocated for the creation of the School Fund is in the nature of an educative process. The school child cannot be taught too early the lesson of self-help, and self-respect which will be awakened through the interest of his achievement. This realisation will develop his skill as well as the intellect.

THE EDUCATION WEEK

AIMS

School celebrations such as the prize-giving, the founder's day, the school anniversary or the education week are valuable because they bring together the old boys and the new, the parents and the staff and maintain the school traditions. In the public schools in England, every opportunity is sought to create new traditions and to conserve the old. For if "education is atmosphere" the healthy traditions of the school mean a vital atmosphere in which the young are reared. For a time the public school idea was over-rated because it was considered the only training ground for character. The public school and school traditions had become convertible terms. Since public schools are residential institutions and as the vast majority of secondary schools in India and England are day schools, it is clear that the latter needed to build up their own traditions, which they have succeeded in doing through earnest effort. School celebrations have been one direction of this effort.

In an Indian secondary school under private management, these ceremonial occasions are utilised by the manager for appealing to the public and the parents for financial and moral support of the institution. The Indian parent is generally too engrossed in the business of bread-winning and the round of private duties to pay any attention to the progress of his boy at school or to school affairs. The celebrations attempt to establish some sort of contact between the home and the school. This contact is inadequate, but without school

celebrations there would be none.

School life has been so far unusually drab for the Indian child. Scouting, school excursions and various other extra-curricular activities have recently been made a part of secondary school instruction in order to provide a vital education. The Education Week provides an occasion when the hall of a high school ceases to perform its periodical and normal function as the dreaded examination hall and assumes a festive appearance for the display of pupils' proficiency in things nearer to their hearts' desire. The staging of the school drama, chorus singing, plays and prayers, solo dialogues or debate competitions, speech-making, display of scouting or physical exercises, exhibition of educational craft in wood, cardboard and artistic design, pedagogical and literary productions of pupils' efforts, contests of skill and games and distribution of prizes now constitute colour and pageantry in an otherwise cheerless round of school routine punctuated by the grind of examinations.

The Education Week or its equivalent in the form of some other celebration has been turned to account, in the past, for different sorts of propaganda. A notable example of this character was provided by the English public schools. Readers of Kipling's *Stalky and Co.* or Hughe's *Tom Brown's School Days* will recall how the ceremonials of important school days had the effect of moulding the plastic mind of youth to the Imperial idea, to the attractiveness of service to the Empire. The Education Week and other school celebrations do provide convenient occasions for popularising valuable educational aims and purposes. There is no reason why such opportunities should be missed if both pleasure and profit can be gained from the plan and purpose of the Education Week. The grain of philosophy can be winnowed from the chaff of

propaganda.

The Education Week is meant above all to be a corporate enterprise in the advancement of education. In high schools, colleges and universities, the co-operation of only the staff and the scholars and in some measure of the parents and the public is evoked. But where the education week celebration comprises the educational efforts of the rural schools of a district or the municipal schools of a city, the scope for co-operation is extensive. The district or the municipal chairman and members of the local boards, the inspecting staff, teachers, pupils, officials and non-officials, men and women have exhibited enthusiasm in the furtherance of aims which find expression through the Education Week. These aims are twofold: to educate the child (and incidently the adult) as an *individual* as well as a future *citizen*. The personality of the pupil is developed through vital education founded on modern psychology, training in handicrafts, physical culture, and, last but not least, choral service of hymns and prayers which inculcate reverence for God. The education for citizenship is sought to be given not only through extra-curricular activities like scouting, but more explicitly by securing, during the Education Week, the exhibition sections of such official agencies as the Public Health, the Agricultural and the Co-operative Departments. Public Health Departmental activities have now become vigorous in rural and urban schools. The Agricultural and Co-operative Departments' activities may soon be expected to become an integral part of the rural education week; the Industries Department could likewise develop its schemes through the municipal education week. What is interesting to note is that it is not only the pupil who is instructed in a vital manner through the twofold aims of the Education Week and the various activities of the several government departments directed

towards the furtherance of these aims. The parent, the pedagogue, the peasant, the public including the passing pedestrian, carry away an abiding faith in the vitality of such an education and a desire to secure it for their children. The co-operation evoked from diverse people and agencies is in itself a valuable training of adults in citizenship. The growth of public spirit is possible only on the basis of such co-operation.

Education weeks have been held, during the last three years at different places in the Benares Circle which comprises seven districts, besides such big municipalities as Benares and Mirzapur. A short description of the different sections of these education weeks will illustrate the principles enunciated in the foregoing paragraphs.

The two annual functions of rural schools have been the district board schools tournament and the teachers' conference. Generally these two events have been held at different periods of the year, with the result that schools had to be closed on both occasions. By combining them into one function as part of the Education Week, the schools will have to be closed only once during this week, for the full or a shorter period. As part of the celebration of the Education Week, the tournament can be expanded to include other stimulative items, in addition to field races between individual scholars and tug-of-war between school teams. The teachers' conferences have usually passed resolutions concerning pay and prospects and on the need for professional efficiency. As part of the Education Week, the district association of teachers has begun to realise vividly the vital problems of educational development and of rural life. Out of the re-orientation of the rural schools tournament and the teachers' association conference has emerged the rural Education Week. It has already expanded in size and has been split up

into sections. While all the activities of the various sections are intended to be educative and stimulative, a few of them have, in addition, a spectacular effect. These spectacular features of the Education Week are the Physical Culture and the Dramatic display sections.

The physical culture display has largely eliminated the element of competition between individual scholars and substituted group emulation in a form other than the usual football or hockey tournament. A school team or platoon consists of not less than 20 pupils, generally 32 scholars, and each school, if its size permits, has more than one such team. Either one or more such platoons of a school, four or six weeks prior to the Education Week, display before judges first physical exercises without apparatus, then in turn exercises with 'lezim', wand and small club and finally drill formations and marching. The judges award marks to the team in each kind of exercise. The platoon or school adjudged best in a "Sarghanai" (central) area has to compete with similar platoons of another "Sarghanai" area. The processes of selection and elimination go on until the best teams, about half a dozen or more of each grade of school, preparatory, primary and middle, meet in group emulation during the celebration of the district Education Week. A few field races and the tug-of-war of the old tournament are retained in the physical culture section. If the weather permits, a swimming competition is also held. The grand finale of this section is held on the last day of the Education Week. The best teams in the district, in each kind of exercise for different grades of schools, give demonstrations of the various exercises. The other features of the display are the exercises *en masse* of primary and middle schools and the march-past of all teams with or without music. During the Education Week of one district the co-operation of the Police Department was invoked and

they lent their band for the occasion. In another district, the same Department lent their parade ground for the display and competition of physical exercises. Lastly teams of girls reading in primary schools display flag drill, 'lezim' and physical exercises. A uniform had to be devised for boys for the daily practice of exercises in school as well as for the annual function, such as would combine simplicity and smartness with little or no cost. Such a uniform has been discovered in the open-necked, half-sleeved shirt or "kurta" tucked under the "dhoti", a portion of which is tied as a smooth waistband in front; with the knot behind. Both "kurta" and "dhoti" are white. No other uniform is permitted with the exception of the green "safa", khaki shorts and shirts (minus stockings and shoes) which have now been universally accepted as the scouts' clothing. The quality of physical exercises in all their variety—including flag signalling, scoutcraft and a scout rally—has been brought to a high pitch of efficiency, through regular daily practice in school as well as through the opportunities provided by the organisation of the Education Week. The school teachers have been instrumental in bringing about the enormous improvement made in physical education in rural schools. They have been trained at camps and refresher courses held at Benares, and at a number of central training schools, which are institutions for the training of primary school teachers. An account of these camps and refresher courses will be found in a subsequent study.

The Dramatic section of the Education Week stages well chosen plays in the evenings for the benefit of pupils, teachers and the rural public. The plays are both entertaining and instructive. Musical and farcical interludes enliven the crowd. Occasionally short plays are composed by teachers and acted by scholars. Competition in chorus singing is conducted for each

school precisely in the manner of the physical exercises. During the Education Week of one district the admission to the dramatic performance was regulated by a ticket. The house was full for the three alternate nights the play was acted and the amount realised was over Rs. 400.

The vital part of the Education Week is the Handicrafts section. It is sub-divided into an educational exhibition and an open-air workshop in which pupils demonstrate craft processes. The educational exhibition contains completed specimens of arts and crafts practised in rural schools by pupils and teachers as well as pedagogical exhibits in penmanship, composition, maps of historical and geographical interest and apparatus for teaching infants. The open-air demonstration shows boys at work, spinning cotton or jute yarn weaving 'tat', 'nivar', wicks, mats, baskets, carpets, 'durries', coarse-wool blankets and similar articles of local use or industry, knitting woolen scarves, girls doing needle or crotchet work and boys and teachers attempting country soap-making. The educational exhibition and the sloyd demonstration are respectively the product and the process of the programme of education which has been sketched in the studies on experiments in rural schools. The exhibition and the demonstration are educative, because they visualise how children and teachers have developed their intellect and skill; they are stimulative, because they embody concretely valuable educational aims and purposes. They may lead to a revival of rural arts and crafts that have been neglected and are in danger of decay through the one-sidedness of literary education.

The teachers' conference, when held in the midst of the manifold activities of the Education Week, will not be likely to confine itself merely to a purview of its service interests. It would take account of the

educational developments that find expression through the Physical Culture, Dramatic and Handicrafts sections of the Education Week. Discussions on educational methods, instructional efficiency and the new tasks in rural education may be expected to be stimulated through the annual gathering of teachers on such an occasion. Moreover, demonstration lessons are given by expert teachers on the subjects of the curricula in middle and primary schools. The district association of teachers has still to consider the new tasks in rural education; the scheme of public health, sanitation and first aid which the Public Health Department seek to propagate in villages through rural schools. Other tasks for teachers are to act as village scouts and guides for the village folk who may seek their help in times of distress and difficulty. The teachers, in short, need to consider at their conferences this aspect of the duties of citizenship which their enlightenment amidst the widespread ignorance of the rural population imposes upon them. In working out the "craft and gardening" programme of education, the village teacher has not spared himself. If he persists in his efforts, he will find that in the process of adjusting the village school to the new needs that have arisen in rural India he will acquire the capacity of acting as the guide, philosopher and friend of his village, and the necessary influence over the villagers to make them seek and follow his advice in times of distress and difficulty. The critics would then cease to say that the village school teacher has used his influence in either encouraging or fomenting litigiousness among the people. This reproach has to be wiped out.

The Public Health section of the Education Week provides visual demonstration in the form of models, charts and pictures of the common epidemics and their preventive and curative remedies. Pupils who have been trained by the Public Health Staff in Red Cross

work display their proficiency in first aid by rendering it to the injured, real or supposed, and the knowledge of public health propaganda through a repertory of songs and recitations. Short plays with a public health moral are acted by pupils for the benefit of villagers and other pupils. More important than these activities are the magic lantern shows, accompanied by lectures, exhibited in the evening to the audience of teachers, pupils and villagers who collect readily on such occasions. The public health organisation has been spreading in and through village schools which promise to become an effective agency for rousing the hygienic conscience of the rural community.

The Agriculture Department would also find ample scope for extending its activities in many rural schools which have planted extensive gardens and started farms. During the Education Week, it may give demonstrations, tests and lectures to teachers and pupils on methods of improving their gardens and farms. A better quality of seeds may be distributed on these occasions. This Department will find that efforts made to improve rural school gardens and farms will provide it with a demonstration model for the benefit of the village folk. Such efforts will link up the organisation of the Agriculture and Education Departments. It is difficult to forecast the correlation of the Co-operative Department. Since adult education is the special charge of this Department, its place and the importance of its effective representation in an Education Week are obvious.

In one Municipal Education Week, one day was assigned for girls education and women's visits. They flocked to see the educational exhibition and the display of chorus singing and physical exercises. It is not yet possible to ensure a large attendance of women at the rural Education Week. Experience has shown during the Municipal Education Week, that the women's

presence and interest in the celebration of the various activities will prove a powerful influence in the spread of girls' education. Further women, as mothers and kinswomen of the children, will be educated into an appreciation of how education of a many-sided character can mould the body, mind, emotions and character of boys and girls. The influence of women and girls, who understand the benefits of the Education Week, may possibly make itself felt in the home in a keen desire to advance the cause of education in any way that may be open to them.

The features of the Education Week described in this study are not exhaustive. There is considerable room for development in the design and pattern of the Education Week. One way to derive the fullest benefit from its organisation would be to arrange a few instructive lectures by experts in different sections of the Education Week.

The organisation of the education weeks is still in its infancy. To ensure its permanence in the scheme of education of every local board authority, it has to be pointed out that funds required for an annual Education Week should not (with economy) exceed Rs. 1,200. This amount is not large; half of it has usually been met from the local authority's funds, the other half out of donations, subscriptions and the recreation fund of each school. The expenses of travel, lodging and board (part or whole) of scholars, who come from the rural schools, and other charges have to be defrayed. The number of pupils participating as teams should be kept below 2000 to economise expenditure. The device of charging for an admission ticket will partially solve the question of finance, if spacious, but enclosed grounds become available for the various activities of the Education Week. This is by no means an easy proposition. The experience of over half-a-dozen

education weeks has shown that when the enthusiasm and co-operation of the district inspecting staff and the local education authority are forthcoming, the question of funds has not proved an obstacle. Strenuous work of a many-sided character and the demonstration of an effective educational programme, especially in rural schools, have become an essential need of the country. The economic distress and the failure of education to fulfil popular expectations by mitigating its hardship have reduced the entire land, and especially the countryside, to despair. Therefore planned endeavour, and not drift, should be the watchword of those who guide, plan, or lead. This endeavour should be directed primarily to industrial, agricultural and commercial development so as to put bread into the mouths of the people and to bring prosperity to the country. In a planned economic development, education of a practical and many-sided character would play a predominant part. It would educate the people through the school, the integration of the school with the life of the village, forging the links of correlation and co-operation between the school and other agencies working for village welfare and the organisation of education weeks. The choice before every educational authority is that it must either be up and doing or face the peril of destruction which threatens the people. As has been tersely said, people must plan or perish.

SOME NEEDS IN THE PRESENT DAY SECONDARY EDUCATION*

NEEDS CLASSIFIED

A clear statement of the needs of secondary schools should ordinarily precede their fulfilment. At best, and consistently with brevity only tentative suggestions could be offered and certain requirements in schools emphasised. Secondary education comprises middle schools, high schools and Intermediate colleges. One can clearly distinguish between a rural secondary schools systems (largely schools of the first type) and an urban secondary schools system in which the English language has the first place. While a few of the needs of secondary schools are new, arising from changes in social habits, economic and industrial conditions, the environment and life in general; most of the shortcomings of these schools date back to the time of their establishment. Criticism of secondary education in this country has been widespread, both in the press and on the platform, among laymen and educationists. Growth of numbers and the consequent increase of unemployment are, to a great extent, responsible for making the inherent defects of the educational system glaring. The needs of the present day secondary education could be classified as the requirements of organisation, proper schemes of studies or curricula and its correlation with life as a whole.

* A lecture delivered at the Literary Union of the Benares University Teachers' Training College, Benares, in 1931.

GIRLS' EDUCATION

The outstanding lack in the educational organisation is the negligible provision for girls' secondary education in towns; in the countryside there are no girls' secondary schools. It seems that in rural areas, girls should first be enrolled in the co-educational primary schools in much larger numbers. The problem of the provision of secondary schools for girls would then naturally arise in villages and would compel a solution by the force of its own momentum. While the urban parent now desires to educate his girl and would be prepared to spend money on her education, he has not realised as yet that he has also, as a member of the public, to endow funds to establish schools where his daughters may be educated. Unfortunately private and government resources have been very much exhausted during the last five years. Also the demand for girls education has synchronised with a very great expansion of secondary education in general and of primary education as well. The provision for girls' education should however be the first care of governments and local bodies. If we are to educate the girls, we have to face the proposition that private endowment and Government will have to share the cost between them. Private munificence has built mosques and temples in the past and richly endowed religious trusts, should this source dry up when the only temples that the India of today needs are those temples of learning which we call schools? We have raised many temples to the gods, should we now fail to raise them to the goddess Saraswati?

THE TEACHER

A vital factor in education is the school master or mistress, and an organisation which does not ensure

the efficiency and contentment of the teacher would defeat its purpose. Teachers' training colleges and schools have therefore to train a new type of teacher, alert in body and mind and skilful with their hands. The teacher required in the schools should possess a high level of professional equipment, physical and manual efficiency; he should be a scout-master, first aider and sportsman and display, above all, the spirit of a missionary in the cause of education. The managers of schools and the public, if they expect and demand so much of the teacher, should secure his contentment by remembering that every labourer is worthy of his hire. We have yet to create a corps of women teachers to educate girls; therefore facilities for secondary education for girls have first to be provided for, as suggested already.

EXAMINATIONS

The examination system needs reform; the number of pupils sitting annually for the Vernacular Final examination is now over 31,000. Either a board should take over the conduct of this examination or a remedy against breakdown, due to the growth of numbers, may be found in some sort of decentralisation of the machinery for the conduct of the examination. In Great Britain the examination at the end of the full elementary stage (the age limit for the completed course is ordinarily 14 years) is now conducted by the head of each school. The time has probably not yet arrived for such a step to be taken in this country. It is a truism which public criticism has often repeated that instruction and education in the schools have been dominated solely by the necessity for passing an examination. The examinations have now become still more numerous and exacting, since, on a competitive system, they have been made the basis for recruitment to the public services

for want of a better method of selection. Some one has said that the present day youth's first essay in adventure is to appear at an examination. Since we cannot at present get away from examinations, we should so plan or conduct them that they do not hamper the growth of the capacity for independent thinking among scholars. If the pupil has been rightly educated, in a majority of cases he will successfully pass the test of examination; the reverse does not, however, hold good to the same degree.

THE CURRICULUM

The scheme of studies prescribed for secondary schools leaves little to be desired on paper; actually in the schools, great and vital chunks of the well-balanced curricula are conveniently cut out. The first item is languages. Now that English is no longer the medium of instruction, it is a clear advantage to the pupil that he should be bilingual. Goethe said that one who does not know a foreign language knows nothing of his own. Mathematics and the sciences have both a disciplinary and utilitarian value. History and geography, if not taught purely as informational subjects, develop and enlarge the scope of imagination in time and space. The different handicrafts, now prescribed, train the practical intelligence. Physical, moral and religious education, so far neglected, have now claimed the serious attention of the public, the managers and the educationists. The one hiatus is the lack of training of the emotions: music, fine arts, dancing or eurhythmics are still the Cinderella of studies. Further, careful pruning is required in branches of knowledge taught, so that the overweighted curriculum may be lightened. The outstanding need in the curricula of the village schools has been carefully considered in the earlier studies and a plan of action suggested. 'Back to land'

in a wider and truer sense should be the slogan, back not only to the agricultural pursuits of the countryside but also to its folklore, its folksongs, its indigenous games and arts. Village life can thus be re-created. For the girls' schools and studies, the first need of the future mothers of the race, a requirement generally overlooked, is the possession of a sound body. For boys, the Indian educationist would say, improve their physique, and train their practical intelligence and emotions.

FUNDAMENTAL PURPOSES

Organisation is the foundation on which the edifice of education is to be built through a well-balanced scheme of studies. What purpose is this edifice of education designed to subserve? The answer is, a life of service not only to one's people but to humanity. If this purpose is to be achieved, the relation of curricula to the needs of our economic life and life as a whole is supremely important. In respect of the former the present gradual adaptation of the school departments to the need for training the practical intelligence should be accelerated and completed. As regards the fundamental purpose of our secondary education in relation to life, different ideals have been held up as desirable. Education should be directed to the building of character. As an agency for building character, the English public school system has been held up as a model. Mr. S. R. Das, the late Law Member of the Government of India, propounded a scheme, and collected funds, for the establishment of a public school in this country. It is intended to start this school at Dehra Dun. The English public school was and is a good training ground for a ruling caste and, even if the system of education it represents could be transplanted from its original soil, it is doubtful if it would grow well or *widely* in India.

Moreover, in England itself the usefulness of the public school has not remained unquestioned in the changing circumstances of the world today. There also remain still the protagonists of the system of ancient Indian education which may be called the "ashram" education. This system had its basis in metaphysical speculation and philosophy. It is too other-worldly in its aims to be capable of revival in anything like its pristine state in the competitive, overcrowded and mechanised life of the present day. The Gurukul, Hardwar, has been founded on the ancient ideal, but has wisely incorporated the modern sciences in its curricula and a modern outlook in its teaching. The Benares University is an institution which is entirely modern in its ancient historic setting, the holy city of Kashi. We should therefore, it seems, aim, by a process of wise synthesis at combining the valuable elements of the English public schools and the ancient "ashram" schools, to evolve a type which will subserve our needs. The products of this new type of schools should join to sanity and clarity of mind, freedom from social or insular prejudices, manual efficiency and insight into the artistic, the moral and the spiritual values of life. We want, that is to say, the youth to be not only true citizens of India but of the world.

EXPERIMENTS IN HIGH SCHOOLS

DIAGNOSIS AND TREATMENT

The previous chapter has been a diagnostic study of secondary institutions. What is unfolded in the next few pages is the record of attempts at treatment, following the diagnosis, through the process of adaptation of the High School (and *pari passu* the Intermediate College) to the psychological needs of the child and the practical needs of the man. The diagnosis of needs in high schools for boys pointed to the necessity of physical culture and the training of their practical intelligence and emotions. In the present study, the treatment has been confined only to one aspect of the diagnosis, namely, the training of the practical intelligence. This training includes more than the development of craftsmanship among high school pupils.

It will be convenient as well as instructive to consider the experiments conducted in high schools under the sub-heads of rural and urban institutions. It is evident that the environmental conditions of a high school should largely determine the process of its adaptation to become an instrument of intellectual and practical education. The number of rural high schools in the U. P. is 62 out of a total of 220 high schools. Even so the consideration of rural high schools should take precedence, because it is sought, in this book, to focus attention especially on the different aspects of rural education, without excluding from purview other problems in Indian education.

RURAL HIGH SCHOOLS

Until the last decade, practically all new high schools were started in urban centres of population. There has been consequently depletion of the countryside of the most enterprising, ambitious and intelligent sons of the soil by a process of their flocking into towns for the sake of joining the high schools. These urban high schools have, naturally, but to the great detriment of the country, overlooked rural needs. Fortunately, there is now a definite desire among the public, with which Government are in sympathy, to provide high schools in rural areas. It is important that from the start, this extension of higher secondary education to rural areas should be rightly planned, and its objective clearly defined. It would be disastrous to duplicate in the village the existing content and method of the high school education of the city, when not only the content and method of that education but its objectives themselves stand in urgent need of an overhaul. From the above considerations, two rural English middle schools in the Benares division, which were trying hard to attain the status of high schools were required, prior to the fulfilment of their ambition, to start gardening and agriculture in the middle sections and were ultimately recognised as high schools on the express condition of their teaching agriculture as an optional subject for the High School Certificate examination. Both these schools, from their situation, could provide five acre farms—in addition to the land available for playgrounds—without difficulty. The new high schools with agriculture as an optional subject, started their career in 1931, and have since attracted pupils and otherwise flourished. The school farms have grown in size, and agricultural education generally has become popular in the neighbourhood.

Greater emphasis on the practical part of the agriculture course for the High School examination is still needed. One definite and concrete suggestion made here is that the syllabus in agriculture be so recast that the amount of practical and field work on the school farm be considerably increased even if as a result there is a little less of theory in this subject, and some pruning of the compulsory subjects. Agriculture teachers in high schools have reiterated the insufficiency of the amount of practical and field work demanded from their pupils. There has been neither dearth of rural pupils electing agriculture for the High School examination nor unwillingness on their part to do any rough work of the actual operations involved in farming. Since the experiment of introducing agriculture in these village high schools appeared to promise success, other rural high schools or those urban high schools that contained a majority of village lads, have been encouraged to teach the agriculture course. In 1932 another rural high school followed suit, in 1933 a rural English middle school became a high school teaching agriculture besides another old high school which started agriculture, and in 1934 one high school and one urban intermediate college (a residential institution with a great majority of rural pupils on its rolls) have been able to include agriculture as an optional course for the High School Certificate. It is confidently expected that such other high schools as prove suitable for agricultural studies will soon follow the example of these institutions. The popularity of agriculture in high school education holds the promise of interesting developments, along healthy and constructive channels in rural reconstruction.

A rural high school, because it attracts pupils from villages far and near, tends to become a residential

institution. Pupils cannot trudge long distances daily between the school and the home in some distant village. The necessity of their residence on the spot leads to the provision firstly of makeshift arrangements of board and lodging accommodation and ultimately of proper hostels. The village usually boasts of no rooms or houses "to let". In this deficiency lie the hopes of the development of a little colony of pupils and staff devoted to the enterprise of an education that will be true to the needs and the spirit of the countryside. Already in one or two of the rural high schools co-operative dairy-farming has been started on a small scale; in another, provision has been made for the spinning and weaving course of the High School Certificate. The vocational bias of these occupations is closely allied to an agricultural education. The colony of pupils and staff of an agricultural high school need not become too self-centred. The school farm and agriculture could become the agencies of propaganda for improved methods in rural husbandry for the village folk, and the school itself a centre for community effort in village welfare work. And if high schools can show the way in the reconstruction of village life, rural middle and primary schools will, in their turn, function more effectively to fulfil this new rôle of guides in corporate village enterprise as suggested in the previous studies concerning these schools.

The Government Agricultural Department will find in the agricultural farms attached to village high and middle schools and the fruit, flower and vegetable gardens of primary schools ready-made demonstration centres of agricultural and rural knowledge for the benefit of the village folk. The possibilities, if fully realised, will enable the Education and Agricultural Departments to transform village economy and village life. To build such hopes may prove to be an

exaggerated faith in the efficacy of an agricultural course in high school education. It is, however, obvious that governmental and local authorities, as well as public men, have to explore ways and means that hold out the slightest hopes of the amelioration of the lot of the people of this country. It is submitted that the development of rural high schools, as outlined above, holds out promise of one line of advance in village welfare work. The possible weaknesses of the suggested plan of work will be considered after giving a description of certain experiments attempted in urban high schools.

HIGH SCHOOLS IN TOWNS

Nature study, science, commerce, drawing and manual training have been introduced and sought to be encouraged by governments and education departments in urban high schools and intermediate colleges during the last two decades. The bias of higher secondary education has, therefore, become a little less literary and more vocational, less theoretical and increasingly practical. This process has been sought to be further developed in new directions in a high school situated in the city of Benares. Handicrafts, graduated according to the age and mental development of pupils, were introduced throughout the school, beginning from the primary section namely, class III right upto the high section, namely, class X. Paper-cutting, making of envelopes, spinning and clay-modelling were regularly practised in classes III and IV; work in cardboard and in wood, as well as weaving were done in the middle section, classes V, VI, VII and VIII. The teaching of drawing was combined with making border designs and stencil cutting on cloth instead of only on paper. Dyeing of cloth and bookbinding, especially the preparation of all the exercise books for school use

(including stitching the pages, cutting the cover to the size of the exercise-book and the printing on its cover of school, name, class and subject headings by a Gestetner machine) were other items in hand and eye training in the middle section. Various other crafts such as 'nīwar' and 'tat' making, cot-weaving etc., described in the "Experiments in Rural Schools and Other Experiments in Rural Schools" have also been pressed into service in the broadening and widening of the curriculum in this institution. The content of education has been expanded to incorporate artistic and practical craftsmanship, and the method of instruction has been directed to utilitarian ends as aids to intellectual effort. The principal aim of the high school of imparting a sound general education has not been impaired in this process of its re-orientation. The most interesting development of this re-orientation has been the opening of a spinning and weaving department in the high section to enable pupils to offer spinning and weaving as an optional subject for the High School Certificate. After the middle section, a pupil in classes IX and X can now elect in this institution any of the following optional subjects for the High School examination:—

Persian, Sanskrit, drawing, science, spinning and weaving.

This means a bifurcation of the curriculum after class VIII into literary or professional and technical or technological. One of the two 1931 rural high schools has also adopted the full programme of a practical character, including spinning and weaving followed in the Benares high school, as described above. It is noteworthy that spinning and weaving are a variant of manual training, and the craft may soon become as popular an 'optional' in some high schools as the latter has been in other institutions. The boards of secondary and intermediate education may draw up courses and

syllabuses in other subjects of a practical or vocational character, as for example, journalism. It is not, however, suggested that this sort of development in high schools is an adequate substitute for vocational schools of commerce, industry, journalism and other trades and crafts. Great care and discrimination need to be exercised in selecting the occupations for incorporation in high school education. Further, their overlapping in different schools has to be avoided. Music as an optional course for the High School Certificate has the same possibilities in the sphere of 'art' education as the other practical subjects have in the education for 'crafts'. Music will leaven the high school curriculum for the purpose of training the emotions, as the handicrafts have already done something in developing the practical intelligence. Music has already been accepted by the U. P. Education Department as a subject for instruction in the middle section, for boys as well as girls.

THE OVERWEIGHTED CURRICULUM

It may be stated that the development of educational handwork and crafts in the primary and middle sections of the Benares high school has not been made at the expense of other branches of studies. The simple device of lengthening the school hours by an extra half-hour has been adopted, and this additional period has been suitably interpolated, according to seasons, into the school time-table. The parents, the pupils and the staff have not grudged the extra time and labour, because such occupations have proved stimulative and interesting to pupils and staff *and provided vocational guidance for parents*. They have even paid an extra monthly fee of annas two per mensem for each boy to learn handicrafts in his school. It is, however, worthy of consideration whether the overweighted curricula

of the middle and high sections should not be carefully pruned, not so much in respect of the multiplicity of subjects as in the matter of certain items of knowledge taught under the syllabus of each.

HIGH SCHOOL AND VOCATIONAL EDUCATION

It is now necessary to examine whether the foregoing experiments which aim at incorporating in high schools vocational education, or more accurately, giving a vocational bias to education, are rightly conceived and planned. It has been urged by high educational authority that vocational education should form the content of artisan, trade, and technical schools, and that it should not be incorporated in high schools as so many optional subjects with a vocational bias. It is submitted that the aim of these experiments (as well as of the two previous studies) is to supplement artisan, trade, technical, occupational and technological education, and not to take their place. It is not claimed for a moment that these experiments conducted in high, middle and primary schools could be considered an articulated scheme of industrial education for the country. *A scheme of agricultural and industrial education must both precede and follow the scientific development of India's agriculture and industry.* But until such widely-planned industrial education through the establishment of an adequate number of artisan, trade, technical schools and technological institutes becomes possible, the necessity of a vocational bias in general education cannot be easily questioned on the two grounds that it trains the practical intelligence of the pupils and that it further fits them to divert their capacities for earning a livelihood into diversified channels. Even when a fully developed system of agricultural and industrial education starts functioning, the practical character of general education will develop

not only the manipulative skill but the intellect as well. As such, general education will prove a valuable ally of industrial education. The criticism that at least a partial duplication of crafts (including agriculture) courses, and consequently costs, in two different types of institutions would be the result, is, in actual fact, merely theoretical. The teaching of crafts in the vocational school will train an expert for the practice of that vocation. The teaching of crafts in the high school (and in the middle and primary schools) trains the practical intelligence of the pupil. The vocational school makes for craftsmanship, the reorganised high school for practical-mindedness. Modern industry and agriculture need the exercise of practical intelligence, not merely the craftsmanship of an expert. If methods change, the expert has to unlearn much, the man of practical intelligence but little in the process of adaptation to altered conditions of agriculture and industry. The conclusion is, that while experts are required, men of practical intelligence should be available in much larger numbers. For this purpose, a well articulated scheme of agricultural and industrial education could be evolved out of the existing systems without raising the issue of vocational education *versus* vocational bias in high school education. A primary school functioning as suggested in the study on "Experiments in Rural Schools" would serve as the clearing-house of pupils, some of whom would, on completion of the primary stage, be diverted to artisan schools, and the others would go to a middle school functioning in the manner described in the previous studies. The Vernacular Final Certificate would serve the purpose of sending a larger proportion of scholars to actual occupations or to technical schools, the minority joining a high school. This institution, if reorganised to include a vocational bias in its curriculum, will

become a final clearing-house, passing pupils into life's vocations or higher technical schools or technological institutes, and a small minority into the university.

In the partial linking of vocational with general education in the high school as well as in the middle school, the weakness and preference of the Indian parent, of every sort and condition, that his son should obtain the Vernacular Final or the High School Certificate have been carefully considered. Any practical or vocational education tacked on to a school which prepares pupils for either of the two certificates has immensely greater chances of acceptance by the parent and the pupil, than a purely agricultural school or technical institute which is inspired by a local effort for the economic betterment of the people. The agriculture or technical institute will be still further in disfavour if it does not prepare scholars for a certificate of the government departments of agriculture and industry. Some of the trade schools have been unquestionably of benefit to local industries and commerce; only the Indian parent has developed an inordinate desire that his child should first get the Vernacular Final or High School Certificate. So long as his son gets either certificate, the parent will not only be reconciled but will be glad to accept vocational education alongside of the literary education for which the certificate stands.

CO-ORDINATION OF GENERAL AND INDUSTRIAL EDUCATION

A co-ordinated system of general and agricultural and industrial education, as outlined above, is worthy of consideration in the circumstances of this country. Until an adequate number of artisan, technical, and higher technical schools are established all over the land—and no one will maintain that there is a sufficiency

of such schools for a large country like India—it is more urgent that the high schools should be able to develop a strong practical and vocational bias in education. It has to be noted that the suggested plan would be in the nature of an evolutionary process in the growth of the present system of general education. To wait for the advent of a self-contained and self-developing scheme of agricultural and industrial education, keeping intact and unadulterated a purely literary system of high school education, is likely to prove disastrous. The march of events will not await our convenience of adjusting in a leisurely manner the systems of education, general, technical, industrial and agricultural to the economic stresses of the age.

One obvious criticism of the plan advocated in this study is that agriculture and crafts when included as 'optionals' in middle and high school education do not provide an adequate training for such occupations. Secondary education can, at best, predispose pupils for practical pursuits, it cannot turn out full-fledged farmers, artisans and technicians. It follows that if a large number of trade, technical, industrial and agricultural schools are not started separately, the secondary education would remain a truncated system. And if such schools are started, a further weakness of the plan would be that pupils might still choose literary or professional courses leading to a university diploma or degree in preference to the education for 'crafts' or agriculture. The present drift of scholars, including the unfit, towards higher literary education would continue. One remedy is to require from all High School Certificated scholars who wish to join an intermediate college or a university a higher standard of attainments in literary subjects. The High School Certificate would then serve the purpose of Matriculation respectively for literary, professional and occupational courses.

A system of credits, grades, marks or divisions obtained in the High School examination would determine the course for which the pupil will have matriculated. The details will need to be worked out. For these reasons, the reorganisation of high school education along an evolutionary plan does not appear to go far enough. If it is not spectacular as a new departure, the reason is not an excess of caution. The High School has become an integral part of the educational system of this country. Its popularity and traditions have given it a measure of stability. These practical considerations present formidable difficulties in embarking on hazardous experiments. Moreover the immediate and vital need is the reform of the *content* not the *form* (the framework of the organisation) of secondary education.

UNIVERSITY EDUCATION AND ITS IDEALS

INDIAN UNIVERSITIES, OLD AND NEW

During the last decade the number of universities in India has been more than tripled. For about half a century there were only five universities of Calcutta, Allahabad, the Punjab, Bombay and Madras, to which arts and science colleges from all over India and Burma were affiliated. Now there are 17 universities in India; the newly started 12 universities are the Benares, Aligarh, Dacca, Lucknow, Patna, Nagpur, Delhi, Mysore, Osmania, Agra, Annamalai and Andhra. Burma has now its own university at Rangoon. More remarkable than the growth in numbers has been the change in the constitution of these universities. The five older universities, founded on the model of the London University (as it used to be) had no teaching departments. They were merely examining bodies which framed syllabuses and conducted the intermediate and degree examinations, in arts and sciences, on the prescribed courses. The affiliating university, purely of this type, is now the Agra University; the universities of Calcutta, Bombay, Madras and the Punjab, although retaining their old constitutions, have now developed a few teaching departments common in respect of colleges situated at the seat of the university. The rest are unitary, residential and teaching universities. The Osmania University, Hyderabad (Deccan), has attempted the experiment of conducting its entire teaching, even in abstruse and advanced studies, through the medium of Urdu.

This university also maintains a bureau for the translation of standard works in literature, philosophy, science and in other branches of knowledge such as engineering, architecture, archaeology, etc., into Urdu. The Benares University has resolved to make Hindi the medium of instruction for its Intermediate examination. The medium of instruction in the other universities is the English language. The affiliating university has been a presiding body (for purposes of framing courses and conducting examinations) over a conglomeration of independent colleges scattered over a wide area including many provinces: a sort of federal union of the colleges. The new unitary university has been designed on the models of Oxford and Cambridge. The university area and jurisdiction, in the teaching type of university, have been confined to one particular city. The exponent of ancient Indian education and culture recalls, in this development, a possible return to the glories of Nalanda and Taxila, lost seats of centuries-old learning and culture. The university of the new pattern conducts its own teaching in the main branches of the humanities and the sciences; the constituent colleges are residential halls in which some provision is also made for tutorial instruction.

THE DEFENCE OF THE AFFILIATING TYPE OF UNIVERSITY

It has been claimed that the superiority of the unitary over the affiliating university arises from the fact that through its teaching and research departments it can discover new knowledge as well as disseminate the old. The affiliating university in India, that is in effect the affiliated colleges have been charged with the neglect of research. One of the main functions of the teaching university, it is claimed, is the advancement of truth in every field of human endeavour. There is no inherent

disability in an affiliated college that it should not be able to extend the bounds of knowledge but in actual fact, at least in India, it has not had the means to maintain the staff and the equipment which are required for conducting an efficient research department of a university. The history of science does not support the plea that research is always costly, although a great deal of modern research has become dependent on provision of ample funds. The corporate life of the residential university, it has been further claimed, is a training ground in the formation of character and leaves its distinctive hall-mark on university youth. The affiliated college did not strengthen or develop personality. This criticism may be generally true but the inference that the college was an inherently defective institution for the purpose would be wrong. The college could (and in many cases did) build up character and leave a distinctive stamp of its own on its alumni. The causes of the shortcomings found in the old type of college, are more elusive. Perhaps the shortcomings arose from the inability of the college to adapt itself to certain economic conditions of the country rather than from anything inherent in the character of an affiliating university. The university examinations have been passports to the learned professions; the examinations therefore began to dominate the education in the colleges. For the overcrowding of the professions and glut of the unemployed youth, produced by the colleges, public criticism has found a scapegoat in university education. What was good enough in the old days, when the professions sorely needed university men, has ceased to be good. This economic criterion is of general application. The newer universities have not escaped criticism for the poor character of their alumni. It is not unusual for gentlemen of the older generation, who are comfortably established in the

learned professions, to wax eloquent at the expense of the alleged poor specimen of humanity which the university produces now-a-days. The glories of the earlier generation are revived, and their recital loses nothing by the lapse of time. The dead past glows with the imaginary splendours of a bye-gone age. What fine fellows they had in the good old days when colleges (if you please!) were colleges, professors intellectual giants, and youth was the stuff out of which were carved real men, presumably of the type of the eloquent gentlemen. This sort of belief in "fine, old things" because they are old (and therefore fine) is pathetic although untrue. The old remodelled and the new universities have not certainly failed to produce the type of educated youth who, as citizens, can shoulder the added responsibilities which the Constitutional Reforms of Government will lay upon them in the future. Nevertheless university education has made, owing to growth in numbers, the unemployment of the educated classes more acute.

THE TASK OF RECONSTRUCTION

The problem of unemployment is not confined to India and is partially a result of world-wide economic conditions. *The challenge of India's economic life to the universities is, however, deeper: it is whether the intelligentsia is equal to the task of the reconstruction of a new India. Upon the change in the existing ideals of the universities, or the replacement of old ideals by new, will depend their adequacy to meet the challenge.* The needs of an industrial age, and consequently of a practical bias in education, have now demanded attention and received a measure of recognition in the schemes of the Indian universities. The humanities and the sciences were alone, until the last two decades, the recognised subjects of university studies. Law was originally the only professional

course allowed. Later, faculties of medicine and of commerce were instituted in the Lucknow University, and the King George's Medical College, Lucknow, became a constituent college of the university. A conspicuous feature of the Benares University, ever since its establishment in 1916, has been its flourishing Mechanical and Electrical Engineering College. An agricultural college has also been started. Departments of Ayurvedic and Unani systems of medicine have been opened in the Benares and Aligarh Universities respectively. Both universities have departments of education and a teachers' training college. A faculty in agriculture has been started in the Agra University, and the Agriculture College, Cawnpore, has been affiliated to it. These and similar developments have broadened the scope of university studies, have widened the conception of a university's function and have tended to liberalise the character of professional education incorporated into a university. One notable authority, an ex-administrator and an engineer by profession, in an address to one of the youngest universities, expressed the view that a university should become, in order to meet India's present-day requirements, almost wholly utilitarian in the character of its courses and studies. A modern university, however, is neither a technological institute nor a Platonic or Aristotelean academy. Its function is to reconcile, in its corporate character, the claims of philosophy and culture with the utilitarian and practical demands of life. However clear-cut the distinction between pure knowledge and the applied arts may have been in the days of Aristotle, no such division can be maintained in the present state of development of the sciences and the utilitarian arts. In so practical an industry as agriculture, there is a vast field for pure research. The work of a physicist like Sir J. C. Bose on plant

physiology—researches in the domain of pure science which tend to obliterate the dividing line between organic and inorganic matter—has paved the way for applications of the new knowledge of plants and of their behaviour in medicine and agriculture. Moreover, in a democratic age, the university has to take account of the varied capacities of those who enter its portals and to provide opportunity for the development of that bent of mind called practical intelligence, just as much as it has done for fostering the type of intelligence which has occupied itself with the humanities and the sciences. Modern industry has also begun to expect from the university guidance, through research, in the solution of the economic problems that it has to face. Research is best conducted in a university, although the larger industries now maintain their own departments of industrial research. This development is not markedly observable in India with its nascent industries. Nevertheless the needs of India's premier occupation, agriculture, still in the primitive stage, and pressing economic problems created by the growth of population, are beginning insistently to claim the attention of the universities for closer study and solution.

TRAINED LEADERSHIP FOR SERVICE

This partial adaptation of the university to the changing needs of the new India is undoubtedly in progress. The several developments of a practical character in university studies are, however, essentially external adjustments. The question is whether the deeper challenge has been understood and will be met by the university. It sounds like a truism to say that the aims of university education are determined largely by the demands for trained leadership in the life of the people and the nation. Nevertheless the idea of the

function of the university to supply such trained leadership for the varied departments of modern life has emerged slowly in contemporary educational thought. In India this function of the university has so far been confused with the utilitarian objective of providing a career for the university graduate. The search for a career in a profession or public service may be a laudable desire. What is not equally laudable is the mentality fostered by the university that the attainment of one's ambition in some safe and assured position with prospects, is an end in itself, instead of being merely a means to an end. The university has, in other words, periodically let loose on the country a horde of careerists when it needed a band of missionaries. The youth of the country has not realised, and the university has not made him realise, that a career in a public service or profession means an opportunity for service to the people, and not merely a vantage-ground for position, prestige and power. That is, while the university has aroused his ambition and stimulated his self-interest, it has failed to evoke his devotion. "Education is atmosphere", and the air which the youth has breathed at the university has been surcharged with the talk of the 'Services' and not of service. The choice of a career open to the Indian youth has been severely restricted to the Services or the legal and medical professions, because the commerce, banking and industry of the country have not been adequately developed, except in a few port towns or industrial and commercial centres of population, like Calcutta, Bombay, Karachi, Ahmedabad, Jamshedpur and Cawnpore. Moreover, the commerce, banking and industry of these centres have been in the past largely in European hands and have been manned by European personnel. Also indigenous enterprise has been, until now, sceptical of the capacity of a university youth for business pursuits.

and was and is still conducted on a joint family basis, so that a young man without an adequate family influence has few openings for a business career. The preoccupation of the youth at the university with his future career is defensible on these grounds; the gravamen of the charge really is the spirit displayed by the youth who has realised his ambition after leaving the university. The mercenary in him has appeared more often than not to obscure the missionary altogether.

One illustration is apt. The profession of teaching in India has been associated, through ancient tradition, with disinterestedness and idealism, and even religious fervour. The 'guru's' calling was held sacred in ancient India. In the age of the cash nexus today, education has become for the youth one of the Services, a ladder for ambition, as well as a salve to conscience for service. It is true that in a competitive social order, the teacher has to earn his bread, just as well as every labourer who is worthy of his hire. The fact however is that a youth (including the aspirant for teachership) is apt to forget that man lives not by bread alone. This is the truth that ambitious youth should assimilate at the university and that its ideals should foster.

ORGANISATIONS FOR SERVICE

The forms of altruistic endeavour are many, and one of these that Western universities have developed, is the institution of the Social Service League or Association of University Youth for welfare work among the wage earners. In India there are a number of non-denominational organisations, namely, the Seva Samiti, Allahabad, and the Servants of India Society, Poona, the former founded by P. Madan Mohan Malaviya and the latter by Mr. G. K. Gokhale, which have to their credit a record of valuable welfare work in education, famine and flood relief and in other fields of social

activity. There is another body recently formed for the removal of untouchability and the uplift of the depressed classes. These organisations have attracted the university youth; the call for service has appealed to his latent idealism. But the universities have not yet developed strong social welfare centres, clubs or unions of their own. A beginning has been made in some universities, but no appreciable advance has been recorded.

There should be in each university, in addition, a especial group-circle, or department of debating union, or separate association, for study and work on the agricultural and rural problems of India. It is not sufficient that these problems should be studied merely as part of economic studies and sub-heads of subjects in the Department of Economics. The reconstruction of Indian life is largely a question of rural development. The university should start and maintain its Rural Revival League, which would stimulate among students curiosity concerning the life of the village and bring them a realisation of the fundamentals of the Indian situation that needs the devoted service of the educated sons of the soil. The development of industry, commerce and banking is undoubtedly of great importance to the country; as previously stated one experienced administrator has been led to confine the university's function only to this limited objective. It is really the village that presents the deeper challenge of India's economic life to the university for the adjustment of its ideals. The university has succeeded (perhaps unconsciously) with ruthless efficiency in severing its youth from a life of service to the rural community and it cannot at present do better than foster ideals of devotion and service to the village folk.

PLAIN LIVING

The time has also come when the university should

teach its youth the lesson of rigorous simplicity of life. The Indian student has, behind him, a tradition of simple and abstemious living embodied in the doctrine of *brahmacharya*, and it should not be difficult to revive an ideal of existence which we have apparently forsaken. The social usage of early marriage has been responsible for the existence of a large number of married students at the university who have been thus burdened with responsibilities that do not fall to the lot of university students in other countries. There is now a definite movement in schools, which may spread to the universities, against the admission of married students. The Indian student has next attempted, fortunately with only partial success, to adopt a higher standard of life at the universities than the circumstances of this country permit, with the result that plain living is no longer considered a valuable tradition and personal attention to one's own wants has been considered as a degrading drudgery. The traditions of some American universities at which young men have earned money, by their exertions in the field or by domestic labour, for their maintenance and education, breed a more self-reliant type of youth. Indian universities would find the Canadian and American examples in self-reliance more suited to the economic conditions and traditional life of the country. It does not mean, however, that we can reproduce in Indian universities in their entirety conditions prevailing in America, where a large number of students pay their way by extra-mural work. For while such self-reliance is needed in restoring the balance of personal values, American civilization is based on an industrial and social order dominated by the machine. Only a return to a simpler life closer to the plan of Nature could possibly mitigate the ills of a world caught in the toils of materialism. It has needed the agony of a devastating war to produce in Germany her Youth

Movement in education. German youth tramps to her hills and mountains, woods and forests, streams and rivulets to seek the wisdom of the ages. In the India of the past, "ashram" education was consciously directed to such ends. In the university of today we should try to recapture the spirit and the simplicity, inspired by religious fervour, of ancient ideals of education without reviving antiquated forms of organisation and thought. The Gurukula at Hardwar, has attempted this task with some success; the Benares and Aligarh universities with slight success. The Vishvabharati of Dr. Tagore in Bolpur, Bengal, has been a more hopeful enterprise. The Gujerat Vidyapith, the Jamia Millia, Delhi, and the Kashi (Benares) Vidyapith have had their birth in the political storms of the last decade, and their fortunes have tended to rise and fall with the political barometer. None of them has as yet firmly established itself.

Apart from the ideals of life on which the simple, almost ascetic, existence of ancient universities was based, such austerity was in itself a valuable discipline. It safe-guarded a youth against indolence and self-indulgence, and habituated him to hardihood which prevented the weakening of the physical and moral fibre of the race. Soft living is apt to destroy the spirit of adventure, and Indian universities have not had the reputation of caring to see that this spirit is not destroyed.

TOLERATION

An omission of modern universities, in India and elsewhere, has been the entire lack of cultivation of the spirit of toleration. Indeed it is doubtful whether ancient seats of learning, which were more explicitly denominational in character, so shunned light from other quarters. With the growth of more intense national consciousness in the West and the East, the

university has been made a handmaid to nationalism, which breeds intolerance. Each nation has acclaimed the superiority of its own culture and considered it a self-imposed mission to spread it throughout the world. Cecil Rhodes maintained in South Africa, with fervour and conviction, that the Oxford University contained the elements of perfection in human endeavour and the ideals and traditions of that university, if they could be spread over the earth, would meet the needs of all peoples. The reaction to this Rhodesian avowal of faith may perhaps account for the legacy in South Africa of separate Afrikaans and English speaking universities from each of which coloured students are rigidly excluded. There are thus exclusively white universities in South Africa and these are further divided in respect of the medium of instruction. Before the War, Germany had developed a 'Kultur' complex. This competition of cultures culminated in the clash of war and revealed the dangers of the spirit of intolerance which had permeated national education generally and those strongholds of culture called the universities specially. The development of its own peculiar culture by a community or people may be a praiseworthy effort, for the ostensible aim of the cultivation of distinctive characteristics is to collaborate with other peoples for the elevation of the common life of humanity. The lesson of experience, however, has been that whenever the development of its special powers or the conservation of its culture by a community or people has not been consciously allied to the practice of toleration, it has led to race, creed and class conflicts. In spite of the work of the League of Nations in the field of education and international co-operation, the world has not advanced to the stage when it could be said to be within sight of the cessation of such conflicts. The inadequacy of the League is, in effect, a measure of the

failure to cultivate the spirit of toleration in education. In India, communal controversies have revealed the need of toleration for the adjustment of the political claims of the minorities; the effects of intolerance in wider fields, in conflicts of class and narrow nationalism are more devastating. The university has, therefore, to train young people for world citizenship. The Indian university can become a good training ground for such citizenship, if it could inoculate its youth against intolerance during his stay at the university, because Indian life presents a mosaic of communities and cultures. Since the high schools are staffed by university men, the spirit of toleration would filter down to the schools. Where could one look for that appreciation of variety of culture and personality and respect for differences in both, if not in the university halls devoted to the pursuit of letters, culture of the mind and search for truth? The failure of the Indian university to foster these ideals is due to its preoccupation with trivial objectives and the absence of a well-planned purpose, in the Western university to the intensity and narrowness of nationalism.

Toleration is perhaps the most difficult of the virtues, and the whole course of history is strewn with the dust and debris of conflicts arising out of intolerance. Religious wars have their origin in fanaticism. Economic struggles arise when, through self-interest, greed and ambition, people become intolerant of the rights of others to an unfettered existence. Social conflict is caused by the denial of opportunity for development to certain sections of society. Humanity has emerged slowly and painfully from its animal ancestry. Mankind has had an uphill fight, which continues and is really unending, against the savagery in its make-up. The great prophets of religions are the milestones that record the march and triumph of humanity along the

pathway of this struggle. Each foothold is a precious gain, the fruit of strenuous endeavour of thinkers in the realm of the spirit. The great religions have appeared, on occasions, to weld together particular peoples in certain regions into one brotherhood, to the exclusion of the rest of humanity. Creeds are but fragments of Reality which is truth in Unity. All religions, when analysed have a common bedrock principle, the brotherhood of humanity as the manifestation of the Divine. Indeed the unity of the universe is the one, the divine principle. The advance towards the realisation of this brotherhood has been slow and halting because the spirit of toleration has not permeated education. Since trained leadership of the modern age largely comes out of the university, the failure there has been especially disastrous. We have harped a great deal on the religious ideals of ancient educational systems in India and on the materialism of university education. We have however missed the truth that the finest essence of the religious spirit is toleration, which is a cultivated attitude of the mind and the divine stamp of the soul, and which needs no churches, mosques or temples for performance of practice or rituals. We have raised those temples of learning, called universities, and they have so far failed us.

The apology for sermonising, at such length, on the commonplaces of toleration is that the issues of peace and war hang in the balance. And the modern university has still to create the new leadership of peace on the earth

PHYSICAL CULTURE AND PHYSICAL EDUCATION .

To an observer some features of the Indian educational system would be accountable only on the assumption that a human being was a disembodied spirit. Physical culture has, in the past, received as little attention as the cultivation of arts and crafts. The child or youth has been apparently conceived to have a hollow head, minus hands, feet and a body. The teacher's task has appeared to begin and end with pouring or hammering knowledge into this hollow head. During the last decade, the condition of national physique has received much greater attention, even if its culture lags. The maktabas and Sanskrit pathshalas which survive entirely neglect physical instruction. And yet the Sanskrit education of antiquity was reputed to combine a harmonious culture of body, mind and spirit. Archery, swimming and wrestling were practised, moral continence and a simple and vigorous life were enjoined during *bal* and *brahmacharya* or the *status pupillari*. With the passage of centuries, the vital spirit of that education has been lost while its outworn creed and form appear to have been preserved. In secondary schools and universities, modern games have often displaced physical culture; the result has been the neglect of physical training on a sound and organised basis. Granted that even in the West "physical culture has claimed parity with the culture of the mind" late in the history of education, the result of a century of modern Indian education has been a perceptible decline in the health and vigour of the educated class.

Economic factors have also contributed to this decline; principally however an undiluted academic education has lowered vitality. Further the mechanical transport and contrivances of the age have bred love of comfort in the intelligentsia. The ideals of the cultivation of hardihood in the race have been forsaken. In Western education, the emphasis on organised physical instruction has counteracted the softening influence of modernity, has improved the physique of youth and preserved the spirit of daring and adventure among the educated classes.

INDIGENOUS PHYSICAL CULTURE

Outside the present day schools, in the life of the people, there has lingered a tradition of physical culture which has come down from antiquity and whose origin could be traced back to the life of the ancient Aryans. They practised the profession of a warrior and made their homes on the banks of rivers or in groves or other pleasing spots which abound in the hills and plains of India. It was in certain "ashrams" or sylvan academies of Sanskrit education that physical culture first found place in schools. This tradition of physical culture, both in and outside the schools, has been attenuated through the passage of time, the neglect of the people, especially of the intelligentsia, and the decline in the prosperity and political fortunes of the country. The "akhara" or wrestling arena found over a large part of India is the direct lineal descendant of the practising ground of the Aryan for the profession of a warrior. The "akhara" is, by tradition, a sort of spontaneous local association of people in a neighbourhood where they come together for physical exercises and culture. A small square piece of ground, sprinkled with soft brown earth, provides the arena for wrestling and exercises. Indigenous physical culture of the

“akhara” generally consists of a number of two or three simple exercises, without elaborate equipment or apparatus. A pair of heavy wooden clubs is sometimes the sole equipment. Besides wrestling and other muscular exercises, the larger “akharas” have provided training in swordsmanship and fencing with sticks. The “akharas” meet in the early morning and late in the evening in summer, and in the morning and afternoon in winter. During the nineteenth century, the “akharas” were often patronised and financed by the educated middle class. In the twentieth century, they have declined due to the neglect of the intelligentsia. They have become the resort of professional wrestlers and men of low status and have therefore lost reputation in public esteem. They need to be revitalised, since they meet a distinct need for the preservation of vigour and physique among the people. The “akharas” have not as yet regained their old popularity among the educated middle classes, whose interest in them is confined to occasional visits as spectators of professional wrestling matches. The physical culture of the “akharas” is simple, inexpensive and quite vigorous, as in wrestling. It is deeply rooted in the life and traditions of the people. It has its defects: it is largely individual in character, since there are no group exercises, and does not consequently develop a sense of discipline. Moreover, the exercises are not graduated according to age or development; they are practically identical for young children, adolescents and adults. The “akharas” have no regular financial support; they are maintained out of public subscriptions from the neighbourhood, and by casual fees from the patronisers. They however need only a small piece of open ground, five yards by five, for wrestling and other exercises, otherwise they would be further handicapped for a meeting place. The “akharas” have provided the only means for physical

culture among a people who have had no opportunity or skill at organised games and sports, and who have been, moreover, through ignorance and poverty, too distracted by the struggle for existence to devote time and effort to the preservation of health and physique.

BHARAT SEVA MANDAL, BENARES

The attempted revival of an "akhara" as an indigenous physical culture institute, called the Bharat Seva Mandal, Benares, will illustrate the difficulties which still impede the efforts made to revitalise it in the life of the people. The name Bharat Seva Mandal has no reference to physical culture, it means a society for service of India. This choice of name is significant in two ways. Physical culture is now considered to be a means of service to the people. Secondly, the Mandal has enlisted, through its name and ideal of service, men of light and leading as its patrons and supporters. Its organisation has been modernised; an association with a managing committee has been formed. Financial support is still precarious since it is dependent on subscriptions; no permanent funds have been endowed. Physical instruction is imparted to boys, teachers and such other people who attend for a nominal charge. Part-time instructors in swordsmanship, fencing, wrestling and other forms of Indian exercises such as "lezim", "malkham", clubs etc. have been employed. The Mandal cannot as yet afford to pay for whole-time experts. An exercise ground or "akhara" has been provided and also simple equipment. The Institute really needs more extensive grounds of its own to provide fully equipped Indian gymnasia. The collection of funds has not been encouraging. A fruitful activity of the Mandal has been to train annually school teachers who come largely from village schools of the Benares division and occasionally from other districts

in the U. P. A summer camp is held in Benares, each year, for training teachers in "lathi", "lezim", "gatkaphari", physical exercises, drill, "malkham" etc. The Benares summer is very hot, and it is therefore not the best time of the year to hold a physical training camp. It is chosen to enable school teachers to attend when their schools are closed during the summer vacations. Teachers who have been trained at the Bharat Seva Mandal, Benares, have been useful in popularising in village schools and among village folk, indigenous physical culture. Drill alone is not as popular in village schools as a combination of modern and indigenous physical exercises. The Seva Samiti, Allahabad, an All-India association for social service whose main activity has been devoted so far to the spread of boy-scouting, the organisation of service during "melas", flood and famine and the establishment of libraries, night schools for adults, workers and boys, have also attempted to organise physical training camps for teachers. The modernisation of the "akhara" and its struggle to maintain its existence as a physical culture institute are of recent origin and they are signs that this tradition of physical culture, an inheritance of thousands of years, may be rescued from decline and decay.

One criticism against the indigenous physical culture of the "akhara" has been that it is not based on a scientific system and does not produce a proportionate and harmonious development of the body. The criticism is partially true. There has been little or no change in the traditional exercises which have been practised for centuries. Consequently the "akhara" is considered an empirical development of indigenous physical culture. The theoretical (or scientific) system of this culture also exists, and was apparently practised, ever since the days of Aryan India, by the intellectual and spiritual thinker.

YOGIC PHYSICAL CULTURE

This system has been called the Yogic physical culture. It was developed as a part of Yoga which means spiritual culture. The combination of spiritual and physical culture probably originated in the ways of thought and life of the Aryan people. The natural beauty of the spots chosen by the Aryans for settlement in Northern India further helped such a combination. The simple life of a warlike people, settled in regions of natural beauty, was calculated to develop in them a reverence for Nature. In spite, or perhaps because, of his anthropomorphism, the Aryan became profoundly interested in the realm of the spirit. The Aryan was moreover a warrior and a thinker. There was consequently a fusion of his spiritual culture with his warlike character. The Aryan developed, through this fusion, his system of Yogic physical culture. In the early morning when he was performing his "sandhya" (silent prayer or contemplation) usually in the open air, he included simple breathing exercises, called "pranayam", as part of this religious worship. Simple breathing exercises continue, to this day, to be a part of "sandhya". The Aryan grasped intuitively the fact that the spirit is best served when the body is attuned to its service. And the body could be made the servant of the spirit through the unified culture of both. The practical system of exercises constructed on the Yogic principles consisted of "asanas", plastic poses of the various limbs and parts of the body, which developed mastery and control over the voluntary and involuntary muscles, the nervous system and the breathing apparatus. No equipment of any kind or gymnasium was needed, the "asanas" could be performed in the open air. After the control of the nervous system and the breathing apparatus, through regular practice of the "asanas",

the next step was to develop mastery over the senses and desires of the human being. Thus man could become the captain of his soul; and thereby attain spiritual wisdom and enlightenment. Such briefly was the practice of Yoga, from which developed a distinct system of physical culture. Students of Sanskrit literature, especially of the Vedas, studied the philosophy of Yoga, but there were fewer people who devoted time and attention to Yogic physical culture.

THE LONAVALA INSTITUTE

Attempts had been made at Gurukula, Hardwar, to revive this system. The most hopeful revival is the foundation of the Kaivalyadhama Institute of study and research in Yogic physical culture at Lonavala, near Poona, under Swami Kuvalyanand as Director. He has already done valuable work and won a measure of recognition for this ancient system throughout India. Any further developments of the system will be watched with interest. Swami Kuvalyanand's work appears to have established the old claim of the Yogic physical culture that besides preserving health and developing physique, it is also a system for the cure of nervous and other disorders. The U. P. Government deputed in 1928 an officer of the Public Health Department to visit the Institute. His report was published by Government. The Government had also invited the Swami, early in 1932, to give a demonstration of his methods before a class of selected teachers assembled at Lucknow. He trained them for a fortnight in his practical system of exercises and although the period was short, his visit and demonstration have created an interest in the Yogic system among village school teachers. One necessary precaution is that these teachers' enthusiasm for this system, which has acquired the prestige of antiquity, should not be allowed to outrun their lack of knowledge

and training. The Yogic physical culture may prove harmful to scholars if the instructor is ignorant of its basic principles and practice. The specialist assistant masters or instructors of physical training on the staff of each normal and central training school, institutions for training village schools teachers, should be deputed during at least one, preferably two, summer vacations of two months' duration to undergo the Yogic course under the Director of the Institute. A period of two months' training is the minimum, even for an instructor who has already qualified in some form of modern physical education. After or simultaneously with the spread of the Yogic system in village schools, provided it proves popular and practicable, it could be introduced in urban schools.

EFFECTS OF THE 1920 CONSTITUTIONAL REFORMS

The revival of the indigenous system, the "akhara" and the "Yogic" physical culture, has been due to the quickening of popular interest in the health and physique of the people. The effect has become noticeable in schools also. Since the Constitutional Reforms of 1920, ministries of education have been formed in provincial governments which have to secure popular support. More attention has been devoted towards physical instruction in secondary and higher education. Instructors and superintendents of physical training have been appointed in universities and training colleges. Attempts have also been made to extend the benefits of physical education in primary and middle schools by training village school teachers. This development has been slow, due to wants of funds and also because the number of such schools is very large.

PHYSICAL INSTRUCTION IN THE U. P.

The attempts to reorganise physical education have

been made since the last decade. It is necessary to examine the plan of this re-organisation. The reorganisation in one province, the United Provinces, will illustrate the importance of physical education generally in Indian schools, colleges and universities and of a correct method in policy.

(a) UNIVERSITIES AND COLLEGES

The Universities of Allahabad and Lucknow have each appointed a superintendent of physical training and a staff of instructors and provided well-equipped gymnasia, playgrounds and a swimming pool at Allahabad. The Aligarh University has always encouraged, among its students, all kinds of sports and games especially cricket, hockey, swimming and riding. The Benares University and the affiliated colleges of the Agra University provide playgrounds, gymnasia and materials for games and sports. Games and sports should however only supplement organised physical instruction and not displace it. This has been the weakness of Indian colleges and universities in the past; for only a small fraction of the students can play games. Physical education should mean systematic physical training and instruction for all students, except those who are exempted on grounds of unfitness. A staff consisting of a superintendent and instructors of physical training is therefore essential for the residential universities. The Allahabad and Lucknow Universities have appointed such a staff and have made it compulsory for every student, unless declared unfit, to undergo some form of physical training. This compulsion may not probably be very strict—it is bound to do good. Some people question the need for compulsory physical training in colleges and universities for grown-up students. This criticism can be met by pointing out that physical education should form an essential part of

university education. And if the university authority creates a well-equipped and well-planned physical education department, it has a right to enforce a minimum percentage of attendance upon scholars during a course of physical culture. Those who know Indian conditions intimately will be found to support compulsory physical education, in some form, in colleges and universities.

UNIVERSITY TRAINING CORPS

An interesting and successful development has been the establishment of the University Training Battalion to which each of the universities in the U. P. contributes roughly one company. The recruitment to the University Training Corps, for each Indian university, has been restricted and a number of applicants has to be rejected each year. The admission to the Corps is now keenly desired and all fit students who wish to join should be freely admitted.

COLLEGE OF PHYSICAL TRAINING, LUCKNOW

A college of physical training, or rather a department of physical education, has been started since 1933 in the Christian College, Lucknow. It admits candidates who have passed the High School or Intermediate or even the degree examination to a two years' course for a certificate in physical education. Other departments of the Christian College, Lucknow, comprise a teachers' training class leading to the Certificated Teachers' examination after a two years' course and a secondary school and college preparing respectively for the high school and intermediate certificates. It is probable that the various departments of the institution will exercise a healthy influence on each other so as to mitigate the tendency to excessive specialisation in the college of physical education. In any scheme of a college of

physical education two points are worthy of consideration. The cost should not be prohibitive and over-specialisation in physical instruction (unless the teacher is serving on the staff of a residential institution, a school, a college or a university) is not generally as useful or desirable in Indian secondary institutions as that the teacher should possess good general qualifications in the form of a university degree or the intermediate or high school certificate and thereafter attend a college of physical education. Physical training is a compulsory subject of the school curriculum in theory; not being an examination subject, physical culture has not in practice been assigned its rightful place in the school. This purpose requires in the schoolmaster as the indispensable basis, general education represented by a university degree or the intermediate or high school certificate, then expert knowledge and special training in physical education and preferably also pedagogical training. He could then become a teacher-instructor. For these reasons, it is desirable that every training college for teachers should include a department of physical education as its integral part, and then a very limited number of colleges of physical training will be needed throughout India. An unthinking multiplication of such colleges will be neither economical nor advantageous to the country.

PHYSICAL TRAINING INSTITUTE, MADRAS

The Y. M. C. A. Institute of Physical Training, Madras, is a college of physical education, the first of its kind to be started. It admits graduates to a one year's course in physical education and grants its own diploma which is recognised by the Education Department of the Madras Government. An undergraduate is admitted to a two years' course for the certificate examination. Teachers who take the diploma or the

certificate from this institute find employment as physical training instructors in schools in South India and elsewhere. A few teachers holding this diploma have been employed in the U. P. and have done valuable work.

TEACHER-INSTRUCTOR *vs.* SPECIALIST INSTRUCTOR

The question of teacher-instructor *versus* specialist-instructor needs to be closely examined. The college of physical education trains the latter, the physical instruction department of a training college the former. This question has been discussed at conferences of headmasters in England and has been ventilated in the columns of *the Times Educational Supplement*. It is especially instructive for us in India, since unlike Great Britain, we have only a few residential or public schools and a large number of day schools. It has now been generally accepted in India that schools need a type of physical instructor different from the army. The army-instructor, whether retired or on active service, has done some sort of work in schools, but physical education should preferably be taught by teachers, like any other subject of the school curriculum. Such a teacher-instructor would understand school children and their physical needs better than the Service or ex-Service instructor. The latter, on account of his lower social position and status, does not command the respect of his pupils. The supporters of the army-instructor consider that he has a stricter sense of discipline and a higher standard of physical fitness than the schoolmaster; and that if he is efficient at his job, the boys are bound to like him. The result of the controversy in England has not been conclusive, although the number of teacher-instructors has now been increased. Conditions in Indian schools have been such that it has been decided by the Education Department in the U. P. to displace the

army-instructor altogether. While it is a fact that physical instruction in Indian schools under retired army-instructors had been seldom efficient, there were many ways in which the drill instructor of the old type was handicapped. The instructor, (or drill master as he was usually called), received a low salary, his education was meagre and he was employed in schools when he was past his prime. He therefore failed (with few exceptions) to command respect from pupils. Also the headmaster, staff, parents and boys were so pre-occupied with the studies prescribed in the school curriculum that physical culture received scant time and attention. Games were played, necessarily by a small minority of pupils and they were not in themselves a substitute for effective physical instruction. Since conditions were unfavourable, the drill instructor could not do better than the little that was done in schools which passed for drill and physical training. The U. P. Education Department have now decided to staff the schools with non-army instructors as and when the old instructors retire. The recruitment will ultimately be confined to teacher-instructors and specialist-instructors of the type distinguished in the second sentence of this paragraph. The latter would be graduate or undergraduate *untrained* teachers who have taken a diploma or certificate from a college of physical education. They would have to be adequately paid; and as men of good general education would command the respect of their pupils. A partial objection against their employment in day schools has been that after a certain age, say forty or forty-five years, when past their prime, they may deteriorate in efficiency for teaching such a strenuous subject as physical education. For want of pedagogical training they may prove unfit to teach other school subjects. The specialist-instructor would not however be entirely sterilized for literary

instruction if a wise headmaster has not confined his work solely to physical training when he is young and therefore capable of improvement under guidance as a teacher of other subjects. A teacher-instructor, who has undergone both pedagogical and physical training, could teach other subjects of the school curriculum when he passes his prime, while younger men similarly trained would give physical instruction. The objection against him is that he is a sort of amateur physical training instructor and not an expert. His training in physical education has neither lasted for the same duration nor been as intensive as that of the specialist-instructor. Also it has been argued that the specialist would not deteriorate in efficiency (for purposes of physical instruction) as much as it is imagined when he passes his prime; at his best, he will be undoubtedly more efficient than the teacher-instructor. For such of the Indian schools as are largely residential or of the type of English public schools, a specialist in physical education would prove superior to a teacher-instructor. The expert could train the pupils, who are in residence, outside the school period and give them a sterner type of physical education than would be possible in day schools. As he would have much more work to do in a residential institution, there is less chance of deterioration due to inactivity or advancing age. Nevertheless for the large number of day schools, a teacher-instructor would be a more suitable type. The day scholars, living in homes of varying social strata, some of them ill-fed, would not benefit from physical instruction of a sterner or quasi-military character. As there would be no uniformity in the home life of pupils, strict regimentation in school would not be desirable. A teacher-instructor would realise these needs, when a specialist may not make any allowance for them.

(b) TRAINING COLLEGES

The U. P. Government have appointed since 1928 three officers called superintendents of physical training. One of these has been appointed at the Government Training College, Allahabad, which admits only graduates and the other two have been appointed in the two government training colleges at Lucknow and Agra for undergraduate teachers. Two of the three superintendents are trained graduates, one of whom has taken the diploma of physical education from the College of Physical Training and Hygiene, Dumfermline, Scotland and the other from the Y. M. C. A. Institute of Physical Training, Madras. The third is an untrained graduate who has taken the Dumfermline diploma. All would-be teachers in the three colleges attend a general course in physical instruction and the conduct of games lasting for a period of not less than three months. Selected teachers attend a more intensive course for a longer duration in order to specialise in physical instruction and organisation of school games and athletics. If the examinee is successful this specialisation is endorsed on the teacher's diploma certificate. While therefore every teacher who comes out of a government training college should be able to handle a class of school boys in physical exercises, athletics and games, those who specialise would ordinarily be entrusted with physical instruction in anglo-vernacular secondary schools. It would be a distinct advance if all teachers at a training college were required to pass the course which is designed only for specialisation. Each training college for graduates which forms a constituent part of the Benares and Aligarh Universities provides a course in physical education for the would-be teachers, but has not as yet adopted the scheme introduced in government training colleges.

(c) TRAINING INSTITUTIONS FOR TEACHERS OF MIDDLE
AND PRIMARY SCHOOLS

At the Government Normal School, Muzaffarnagar, a specialist assistant master who holds the diploma in physical education of Denmark has been appointed. There are seven other normal schools in the U. P. There are no specialist-instructors only teacher-instructors for physical education in these schools and in the six government central training schools which train teachers for primary schools. There are several other central training schools (besides many small training classes) maintained by local boards in the U. P. If and when funds become available, each training institution (excluding training classes which would ultimately disappear) should have a specialist-instructor on its staff.

REFRESHER COURSES

In the absence of specialists, the staff of teacher-instructors required for training institutions and for all recognised anglo-vernacular and vernacular schools throughout the U. P. is being trained by holding special refresher courses and camps in physical instruction. These courses are of two kinds.

The refresher course of the first kind is held for the instruction of 30 or 35 selected teachers, purely in methods of physical education. The duration of the course is ordinarily six weeks and the three superintendents, the assistant master in physical training at Muzaffarnagar and another at Benares who had obtained the diploma of the Y. M. C. A. Institute of Physical Training, Madras, have held these refresher courses at different centres in the United Provinces. Gradually therefore a corps of teacher-instructors in physical education is being raised for staffing all kinds of schools.

The duration of the refresher course, six weeks, occasionally cut up by holidays, is barely sufficient to give adequate training to teachers. With a limited staff of specialists for training teachers it does not seem feasible to extend the duration of the refresher training. It should however be possible to ensure by cutting down unnecessary holidays that the instruction lasts really and not nominally for six weeks. Further these refresher courses and camps should become a regular and permanent part of educational organisation.

A second kind of refresher course has been regularly held at four or five central training schools of the Benares division. The duration of the course is five weeks and it is held in May just after the Primary Teachers' Certificate examination. The refresher course is described in a previous study on "Experiments in Rural Schools". The refresher course combines physical instruction with pedagogical training. The duration of the course, to be effective, should not be less than six weeks. Such refresher courses should become a permanent feature of all normal and central training schools. The underlying assumption of these refresher courses is that the schools should be staffed largely by teacher-instructors and not by specialist-instructors. The advantage is economy and with limited funds, in no other way can the large number of schools be staffed rapidly and effectively with teacher-instructors.

(d) ANGLO-VERNACULAR INSTITUTIONS

The anglo-vernacular institutions include intermediate colleges, high and middle schools. The inefficiency of physical instruction by the drill-instructor has been described. Physical education has improved perceptibly because there are now available on the staff of many (but not all) of these schools teacher-instructors

who have attended a refresher course in physical education under the specialist staff. Physical exercises now form as important a part of the time-table as any other subject of the school curriculum. The period for physical training should be not less than half-an-hour in winter; it may be shorter in summer. For a day school, physical instruction could preferably be given during the school hours when the weather permits, and games should come in the afternoon. During the summer and the rains, many schools in the plains generally meet during the morning hours. Physical exercises should therefore be done the first thing before commencement of school—and if it is raining, the exercises can be performed in the school verandahs. Tuition could begin after a rest of ten minutes. All day schools do not moreover possess adequate play-grounds for games, so that systematic physical instruction during the school hours becomes essential. In a residential institution physical exercises can be done outside the school period. It is necessary for educational officers and authorities to grasp one essential fact in secondary education. The possession of a High School Certificate is no longer an insurance against unemployment, but sound health and a well-developed physique are factors in personality which shall never cease to be prized. They signify energy and vitality which will prevail against adverse conditions.

MEDICAL INSPECTION OF SCHOOLS AND DIETARY

An organisation for the medical inspection of schools exists in the U. P. and is now a branch of the Public Health Department. If correlation is established between physical instruction and medical inspection in schools, valuable results will be obtained. A beginning has already been made. All teachers who attend either a refresher course in physical education, or the full ten

months' course at a normal or central training school are also trained in the principles of hygiene, sanitation and first aid by the school health officer or the medical officer of health. Allied with improved physical education and medical inspection in schools is the important question of adequate feeding of youth and children attending day schools. Effective physical training of students means more vigorous physical exercises. Headmasters and school health officers have therefore to ensure that pupils are suitably and adequately fed. Appeals for the co-operation of parents have not proved entirely successful. Due to poverty or apathy and ignorance many parents will not or cannot feed their children (who attend school) properly. The experiment of providing a feed of sprouting gram to all pupils has been tried in anglo-vernacular and vernacular middle schools and has proved successful. The apprehension that pupils who come from well-to-do homes will not eat gram has proved groundless. The gram is previously soaked for twenty-four hours or more until it sprouts and is distributed, mixed with a little salt, lemon juice and ginger, to pupils half an hour after the period of physical instruction. Sprouting gram is rich in vitamin content and has been recommended by the Public Health Department in the dietary for students. Moreover Indian tradition has always considered sprouting gram a suitable sustenance after physical exercises. It is a simple arrangement, the cost is small and is met from the games fund of the school so that pupils have to pay little or nothing extra for it. Occasionally about twice a month variety is provided in this simple *menu* by distributing seasonal fruits. It is necessary for the success and popularity of sprouting gram as a high school feed *that it should be varied at least once a week* by giving fruits or nuts for which a small monthly fee could be levied. In many schools the games fund is

sufficient to meet the cost of sprouting gram without curtailing games. The sale of stale or unsuitable sweetmeats by hawkers in school compounds during the midday recess has declined. Parents will thus save their pockets and pupils their health.

(e) VERNACULAR SCHOOLS

The so-called vernacular schools include middle, primary and preparatory schools. The largest number of such schools are village schools, and the rest are municipal schools in towns. There has been, in the past, no physical instruction worth the name in these schools. Some district and municipal boards have appointed peripatetic physical instructors. As the nature of their duties has not been well-defined, they have seldom done effective work by their incessant movement from school to school. Many of these peripatetic instructors have now attended refresher courses under specialist staff. They can render useful service only if they are required to hold refresher camps for village and municipal teachers at suitable centres, and provided that the physical training of teachers will not interfere with the tuitional work of the schools. This means two things. The peripatetic instructors will have to cease their St. Vitus's dance round the schools and stop at the centres of training for at least six weeks at a time. The programme of their movements from one centre to another will have to be very carefully arranged and supervised by the deputy inspector of schools and the chairman of the education committee of the local board. The utilisation of the services of the peripatetic physical instructors in this manner is not free from difficulties. In future, no more peripatetic instructors need be appointed at all. There are other and more economical ways of training a corps of teacher-instructors for the schools,

described under the head refresher courses.

SPECIALIST STAFF

Roving specialist instructors of physical training should not be multiplied either by a provincial or local authority because it is a difficult matter to supervise and guide their work. Specialist staff is most effective when posted permanently at teachers' training institutions of various grades. Just one specialist instructor, and no more, should be available under the control of each divisional or circle inspector to train teachers at annual camps and refresher courses and to inspect and guide physical instruction in schools.

TYPES AND METHODS OF PHYSICAL TRAINING

Besides the distinction of physical culture as indigenous and Western, there is a variety of systems included in the latter. There are Danish, Swedish and other physical exercises, besides systems associated with the names of their inventors. The question arises what type will be the most suitable for physical education in our schools. A general answer is that the best elements of the indigenous and the Western systems will be preferable to the introduction of physical exercises based exclusively on the one or the other. This eclectic principle will have the advantages of variety of exercises, Indian tradition and Western prestige. Both systems must be so adapted that no elaborate apparatus or equipment is required in the schools, for the cost of any physical education (to be successful) must as far as possible be confined only to the pay of the staff of instructors.

The trouble with the so-called physical drill, of the past, has been that it has been formal, dull and monotonous. Indigenous exercises have also lacked the element of play, although not entirely. Both failed to

arouse the pupils' interests and made the period of physical instruction burdensome. The fault in our physical education, that is to say, has been largely one of method. Whether we adopt indigenous or Western physical exercises, we have to eschew antiquated methods of instruction. We have to modernise the indigenous and to adapt the Western physical culture to the needs of our schools. *Both processes require to be based on psychology as well as physiology in physical education.*

HEALTH AND PHYSIQUE OF THE PEOPLE

It is a truism that the health and physique of the people are a concern of supreme national importance. In this study, physical culture and education of women and girls have not been discussed because of lack of first-hand experience of the subject. No one could or should fail to realise that the health and physique of the present and future mothers of the race are of still greater importance.

The quickening of popular interest in physical culture should now make it possible to re-establish many languishing "akharas" as so many adult schools of physical instruction. There will then grow up in India a well articulated system of physical education for persons of all ages, children, youth and adults. In modern times, education has been called the first line of national defence; of this education, it will be found on analysis, physical culture is the foundation.

TEACHERS AND THEIR WORK

PRIEST AS TEACHER ,

In ancient India the calling of a teacher was held sacred. The word "guru" has always had a quantum of holiness. In other ancient civilisations also the profession of teaching has been closely associated with priest-craft. Even during the warlike epochs of history when might prevailed, a small minority of the population were preoccupied with learning and letters and were assured of a certain amount of reverence and immunity from the rule of force, because they had devoted themselves to the pursuit of knowledge. Moreover among the common people priests and learned men commanded the prestige and authority of wisdom over ignorance. In the nineteenth century in England, head-masters of important public schools were as a rule recruited from the Church and the introduction of Western education in India had a missionary incentive. The detractors of orthodoxy of a religious education detect a sinister affinity between religion and education. They suspect the priest of a perpetual desire of dominion over the minds of men. These critics discover in some of the other-worldly aims of education the subtle arts of the mullah or the pandit to regain his lost sway over the souls made sceptical by a scientific and too secular education. In so far as modern education has substituted realism (undiluted as in Russia where religion has been displaced as a *bourgeois* and capitalist institution) for the mixture of religious idealism and the scientific outlook in the old education, the former has been attacked on the ground of the materialistic upbringing

of the younger generation. In India the growing materialism of the youth is attributed wholly to this modern ungodly education; although there are economic causes as well. The revivalist believes that the "guru" symbolised the superiority of the ancient ideals of education. This belief is an exaggerated faith. It is however a fact that the transformation of the mullah or the pandit into the schoolmaster has resulted in making both the parent and the pupil, especially in villages, discontented with their lot. It was not the religious teaching of the mullah or the pandit but the even tenure of his vocation which had imparted an element of stability to his life. It was not anything which he said, as the fact that he was himself, simple, unostentatious and unambitious, which had an enduring effect on the life of the pupil and kept in check the ambition of the parent. The mullah or the pandit's religious knowledge was generally rudimentary and his instruction in religion was made up of a number of dogmas and practices in traditional ritual. These also constituted his stock-in-trade for his occasional services as family and village priest. It was his life of work and drudgery cheerfully borne for a pittance that was effective. Any one who adopted the calling of a "guru" whether he had or had not learning and piety, was assured of an absence of worldly goods. With the life of poverty voluntarily embraced (in the less competitive days of the past other openings of a more lucrative character existed) he usually combined an unsophisticated nature. In the rural (and even urban) community of India, this combination marked out the mullah or the pandit as a distinct character. He subsisted on doles in cash and kind received from the community he served and even managed to rear a family thereon. Unlike his cleric prototype of the West, celibacy was not enjoined on the "guru".

It is now possible to understand why, in the past, the priest has usually been also the pedagogue of his flock. It was essentially his poverty, enjoined by all religions on their chosen servants, which appeared to give to the people a guarantee of the unselfish nature of his calling. The priest's services have been ostensibly ministrations to the spirit and the teacher's ministrations to the mind. The two tasks have appeared, in the past, to overlap so that the priest became the teacher and the teacher the priest. Indeed for these reasons the great prophets of humanity, Confucius, Buddha, Christ and Muhammad have also been called the greatest teachers of mankind.

TEACHER *versus* THE PRIEST

In the twentieth century, the teacher has displaced the priest in the field of education. The schoolmaster has become a servant of the state. His function is to build well and truly the growing body and mind of the child and, if he is exceptionally gifted, through the training of body and mind he should train the character as well. The modern teacher's task is less explicitly concerned with spiritual culture; the spiritual function of the old "guru" has apparently ceased in his successor. The consequence is that he does not directly foster among the young religious-mindedness which lies at the root of character. The essence of character is the spirit of service to fellow-beings. The priest as teacher, in spite of the faults of theological instruction and control of education, did inculcate, in the past, the lesson of such service. In the Middle Ages in Europe, called the Dark Ages, the Church kept burning the torch of learning and in spite of the severely scholastic character of studies in the monasteries, the devotion to letters was inspired by the love of knowledge as an instrument of service to

humanity. In Burma, the Buddhist monasteries have proved upto the present day agencies for the spread of literacy among the common people. In India, the gradual disappearance of many pathshalas and makhtabs, which flourished upto the middle of the nineteenth century, (and which now exist as survivals) is not a matter for regret although they were aids to the spread of literacy among the people. A more modern type of primary school has now sprung up in the village and the town. The spread of primary education throughout the land is however slow and incomplete for want of funds and because the organisation has to be built up anew on the decayed foundations of the old makhtabs and pathshalas. The mullah and the pandit in effect functioned as cheap substitutes for, what we would now call, a national system of public education. The disappearance of the "guru" and the emergence of the school teacher are due simply to the fact that the former would be an anachronism today. The mullah or the pandit has been too deeply versed in the theological, classical and scholastic traditions of education to be able to adjust himself readily to the new needs of a secular age. His lack of professional training as a teacher has further unfitted him for the task of the modern schoolmaster. His severely linguistic education in Sanskrit, Persian or Arabic and his theological bias render him, with few exceptions, untrainable for the task of a primary or secondary school teacher. He lingers in pathshalas and makhtabs as a survival of an ancient tradition of education and in secondary schools as a language teacher where he is made the butt of the youthful pranks of an irreverent generation.

Political and economic development and social and religious changes have brought about the transformation of the pandit into the pedagogue. The former has now shed his theological character and sunk into

that humble functionary of the state, the teacher. Political development in India has been inspired by an insistent urge towards the principles and institutions of democracy. The vital need of a democracy is an instructed people and at no previous period in the history of India has there been such a widespread demand for mass education. The education of the huge population of a sub-continent is a task which only a modern state can hope to undertake with any certainty of accomplishment. No theological system or institution has, in the history of education, attempted such a task. However effective the mullah or the pandit might have been in the spread and maintenance of literacy among a numerous people, the agency of education he represented was barely adequate for a small fraction of the population. It was not organised so as to expand rapidly and to become an effective instrument of public education on a nation-wide scale. Moreover the theological grounding of the mullah or the pandit was not an adequate professional equipment for an instructor of democracy. This theological training was acquired in the hardest school of scholasticism. It required unremitting toil, blindly devoted effort and drudgery in the study of scriptures, religious and classical literature and grammar. This discipline gave a certain stolidity of character to the mullah and the pandit, which they needed to face the drudgery of their life-work and the poverty which was their unfailing lot. They were not systematic in the routine or plan of their daily work but they made up for lack of system by detaining scholars for long periods and by coaching them at untimely hours. If we can forget the fact that they pulverised any atom of originality which their pupils might have possessed, it is possible to admire the efficacy and thoroughness with which they ground their scholars into the rudiments of knowledge. The stock

of this knowledge was meagre. It consisted of the ability to read with fluency scholarly Persian or Sanskrit literature, and write painstakingly clear and legible letters and words in the pathshala or the maktab, to be followed by an illegible scrawl as soon as the pupil entered his chosen vocation. Calligraphy was practised as a separate art or accomplishment. Memory was especially trained by persistent recitation of religious scripture and holy books. In the pathshalas capacity for mental arithmetic was developed by hard practice in oral calculation of intricate sums in "mahajani" (commercial arithmetic) or in formal drill; the maktabas do not appear to have given as much grounding in calculation and arithmetic.

It seems certain that only a negligible proportion of scholars under instruction in a maktab or a pathshala came from "kisan" homes. The peasant had no tradition of literacy and the instruction of a linguistic character was of no utility in his agricultural occupations from which he could ill-spare the children to attend a pathshala or a maktab. The 'kisan' and his son's vision had not as yet strayed from the ancestral fields. Only those classes of the people who earned a living by the pen or trade sent their male offspring to the pathshala and the maktab. Zamindars or other rich folk preferred to place their sons under a learned maulvi or pandit as private tutor.

The standard of instruction in the pathshala and the maktab was not high and the scope for studies was limited; for advanced education pupils either studied under a private tutor or attended an academy of theological and classical education in a centre of scholastic culture. These academies attracted pupils from homes where scholarship and letters had become a hereditary profession. There were no girls reading in the maktab, the pathshala and the academy. It is noteworthy that

there was no conscious aim of any section of the people to educate generally their girls. The one possible exception was found in the homes of the nobility where girls were educated. The girl was instructed by a private tutor, generally in company with her brother in classical literature (including versification), theology, music and accomplishments. It was an education of ornament and culture in order to distinguish the daughter of an illustrious house or a wealthy home. Old and accomplished scholars were selected as tutors. They were superior in knowledge and status to the maulvi of the maktab and the pandit of the pathshala.

TEACHERS AND THE TRADITIONAL EDUCATION

It is possible to distinguish the principal characteristics of teachers and their work in this traditional system. While the teachers kept alive among the people respect for learning and spread literacy among a section of the population, the system failed to instruct the mass of the common people who worked on the farm, in the fields and the workshop. It entirely neglected the education of girls because the system was not designed by tradition or function to meet the needs of girls' education. The objective of universal education, irrespective of class and sex, is a conception of modern democracy and has grown slowly during the last one hundred years. The maktab or the pathshala could not possibly anticipate or fulfil such an objective, since it has evolved from the dynamics of political philosophy. The character of instruction was nominally religious, really theological, and utilitarian, but not practical. Both distinctions are important. As only the sons of people who lived by the pen or trade came to the pathshala and the maktab, the severely literary and scholastic character of studies suited their needs. Instruction was therefore utilitarian in the sense that it enabled

children to follow their fathers' occupations. There was no utilitarian education of a technical and technological character. Arts, crafts and cottage industries flourished outside the schools, through hereditary occupations of castes and classes of people. Education in the maktab and the pathshala was not practical because it did not train hand and eye and provided no manual activity for the outlet of the child's natural bent for physical movement and play. Consequently discipline was repressive and the maulvi and the pandit believed in and acted on the maxim 'spare the rod, spoil the child'. Instruction was theological because it consisted of memorisation of the scriptures and because it attached importance to rituals and dogmas. It failed to foster among children ideals of devotion and service to the people because theology provided in its observances sham substitutes for these ideals. If the morning bath in a sacred river or diligent attendance in the temple or mosque could purify the sinner, there was no need for painful efforts in service to one's neighbour.

The teacher's poverty and lack of professional equipment and method or system in teaching have been previously stated. Physical exercises, games and athletics were unknown in the maktab, the pathshala and the academy. Even indigenous pastimes were few and were prohibited during the period of instruction. As lessons proceeded in a leisurely fashion, their dilatory pace compensated for the absence of regular breaks for rest in the time-table. The maktab, the pathshala and even academies seldom owned buildings of their own; a 'dalan' (verandah) usually housed a maktab or a pathshala and a 'baradari' (hall) an academy. The 'dalan' or 'baradari' (hall) was generally lent free for use by some well-to-do person. As the countryside has grown more populous and poorer, the usage of lending free of rent buildings or part of them for housing a school is

declining. Such accommodation has generally been insufficient and unsuitable. As the population increased, the 'dalans' and 'baradaris' had gradually replaced the grove academies or 'ashrams' of ancient India.

People who advocate that a village school could normally be held under the trees or the open sky do not realise that the money spent upon such instruction is generally wasted. Nowadays a fair proportion of rural and urban primary and middle schools are housed in suitable buildings. Equipment and furniture in the ancient schools were simple, since the pupils squatted on the ground on mats or tats. This traditional method of seating has now been wisely adopted in almost all village (and even urban) primary and middle schools in India. The climate and circumstances are such that for mass education elaborate furniture is not needed. Nor could it be provided due to lack of funds. Only high and middle schools teaching English are now equipped with furniture and appliances of instruction in the style of schools in Western countries. A feature of the old system was that it was practically free education. Scholars paid no regular fees. Offerings in cash or kind were made by them to the teacher on certain auspicious days, occasions or ceremonials. The maulvi or the pandit was thereby maintained (not in affluence) by the community which he served. Private tutors were paid regularly by the well-to-do persons who employed them. For learning music a private music master had to be engaged. There was no instruction in music in any school, although places became noted from time to time where masters in the art rose to fame. Persons attended to learn at these places and under such celebrities in order to adopt music as a profession. Morals were taught by means of maxims and by didactic use of classical and religious literature. Manners were better taught in the maktab than in the pathshala. Courtliness and

urbanity were cultivated in the former; while respect for elders and parents was successfully enjoined by both. Conformity to tradition and obedience to authority in the spheres of religion, intellect and politics were so effectively ingrained by such education that it tended to destroy initiative, enterprise and originality. The spirit of free enquiry was absent from the maktab, the pathshala and the academy. It was only in the highest centres of learning such as Kashi or Kashmir that philosophical and religious speculation flourished. Learning and scholarship were valued, not equally creative thought. Therefore teachers of old were, with exceptions, profound scholars rather than great thinkers. Such was the character of the teachers and such the conditions of their work, until the middle of the nineteenth century.

EUTHANASIA OF THE TRADITIONAL SYSTEM

Changes in the function of the teacher and conditions of his work have not been, since then, merely adjustments of an archaic system to meet the demands of the rational, economic, and democratic trends of the age. The new organisation of primary, secondary, technical, university, technological and professional education has had to be built up from the very foundations. The pathshala and the maktab have decayed. Where they have survived they teach the elements of purely Sanskrit and Arabic learning. Feeble efforts have now been made to revive them as institutions teaching, Hindi, Urdu and the three R's. Their revival as vigorous Sanskrit and Arabic institutions seems to be doubtful. Such slight vitality as they possess could be built up anew into a supplementary branch of the present system of primary education. The newly founded organisation has profoundly affected the outlook, character and conditions of work of the teachers.

EFFECTS OF RATIONALIST REACTION

The growth of science and the spread of scientific knowledge among the Indian intelligentsia have tended to release their minds (and through the growth of communications, of the masses) from the shackles of tradition and have bred in them a critical and rational outlook. A new spirit of enquiry, born of this outlook, has led to questioning of old ways and views of Indian life; and things that were tolerated under the sanctions of religion and custom have been swept away. Some good things have also been rejected along with others that were bad. It is necessary to recapture, if possible, the things of the spirit characteristically Indian, which a hypercritical reaction against the past ignorant acquiescence in pseudo-religious sanctions has lost to us. The reason of the Indian intelligentsia, quickened by contact with the West and its science and thought, could not fail to observe that the teachings of the maulvi and the pandit had few elements of a sound or true religious education. The rationalist criticism of the educated classes has gradually changed the mentality of the school teacher. The vocation of teaching has consequently become somewhat mechanistic in its conception and practice. Education as mechanism has become embedded in the examination system. How has this result been brought about?

The traditional education was designed primarily to cultivate the spirit of man through the culture of the mind and the character. This avowed aim of Indian education can be retraced, through the Muslim period into the bye-gone centuries, back to the "ashram" education of the ancient Aryans. It was based on the Indian philosophy of life, which has been criticised on the grounds of its other-worldly pre-occupation and neglect of the real world. The result of this philosophy

has been to produce the highest culture of a few minds and the ignorance and inertia of the masses of the people. The creative thought of these great minds has been directed to the apprehension of the nature of reality. That the rigour of this reality needed to be softened for the benefit of the daily life of the people did not arouse adequately constructive energy and enthusiasm. This character of Indian life has been reflected in the schools, among teachers, and in the condition of their work. The teacher had been content to make the pupils pliant to tradition and authority. They were taught to respect and obey the elders and all constituted authority, and scrupulously to observe the forms and ceremonials enjoined by the religion in which they were brought up. Studies were made to subserve these objectives of education. The result was to produce among pupils, when they grew up, moral and religious sentimentalism coupled with a standard and mode of life and conduct apparently at variance with the spirit of morality and religion which they professed. The vehemence of profession was presumed to compensate for the dissidence in practice. As moral and religious sentiments were always kept in the forefront of life ostensibly to regulate it, the rationalist reaction seized too rapidly on the supposedly religious bias of the traditional education as the root of the evil in the system. The rationalist argued that what the maktab and the pathshala taught made men averse from critical thought and wedded them to the traditional morality and religion and therefore their religious background should not be allowed to impede the growth of secular education. Secular aims would develop among people initiative by freeing them from the restrictive influences of tradition and superstition. The teacher reacted readily to this criticism. If his superiors in intelligence were attracted by the achievements

of the education and scientific culture of the West, he was eager to follow the lead in education which promised to yield more material results. He forsook the old ways of the maktab and the pathshala and became eager to learn the method and the content of the new education. The method of instruction in primary, secondary, vocational, technical and higher education was directed to the training of the mind and the acquirement of skill and knowledge, and only indirectly to the training of character. The content of education was borrowed ready-made from the Western scheme of studies. The secular studies of the West were logical, scientific and critical, and were considered to constitute a rationalist scheme of education. The methodology of teaching was derived from the study of psychology; and the curriculum and the time-table were meticulously planned. The teacher hastened to reproduce an Indian pattern of the Western education. The latter had standardised a measuring rod in the form of an examination certificate. In India the need of an examination certificate as a yard-stick was intensified by the fact that the British administration recruited its public services from among those who passed the necessary examinations. In reproducing an Indian replica of the education-pattern the teacher encountered no insurmountable difficulties because the content, the method and the examination system of Western education were duplicated. He found in the 'examination' a convenient winning post in a newly discovered race-course of education. He needed the winning post of 'examination' as a landmark since the course was unfamiliar and his early educational efforts were uphill work because the new education was not a spontaneous growth of an indigenous culture and system. The utilitarian objectives of the teacher and the taught also stressed the importance of examinations. This influence will be treated more

fully under the economic pressure of the period on the teacher and the conditions of his work. It is now possible to isolate the good in the old education which the rationalist reaction has suppressed along with the undesirable things of the past.

The essential feature of the traditional education was, as already stated, the cultivation of the spirit in man. This basic ideal was however difficult to attain and keep up to in educational practice. That the principle of the supremacy of the spirit and its culture must have been assimilated in education is proved by the vitality which the old organisation has had in the past in Aryavarta and during the Islamic period. How did this religious ideal permeate the consciousness of the people as a whole, since education could reach only a minority of the population?

In the highest schools of learning, philosophical especially metaphysical, speculation was an absorbing occupation of the wisest in the land. Through their example and teaching, other institutions of education were tirelessly moulding the plastic mind of the young into the ways of thought and life in which the spirit should dominate both mind and body. The greatest scholar and the humblest teacher repeated as a fundamental maxim in education that unless man strove to mirror in his soul the Godhead and thereby to realise that his life was a spark of the Divinity, all his learning and wisdom were naught. Even when this basic teaching—was not consciously taught, at all times it was made the bedrock principle or the unconscious and subconscious constituent of young minds. It was the educational atmosphere which they breathed, so that they may live and learn. When a youth completed education and entered life his contacts with people around him served in a slight measure to permeate mass-consciousness with these basic ideals.

It was a successful process of infiltration of the mass-mind by the spiritual thought of the intellectual leaders of the people. The vitality of the process depended on the truthful conviction and example of the educated classes. The wide-spread success of this spiritual appeal to the people was however due to the life and teaching of the instructors and less to contacts established by the instructed. It was principally the teacher, not the taught, who moulded the mass-consciousness of the untaught. He was a teacher-priest, his poverty was a symbol of sanctity and his learning inspired respect. For these reasons, the teacher in India had commanded reverence. The rationalist reaction has diminished almost to a vanishing point this traditional prestige of the "guru". The loss of the "guru's" influence over the people was due to the fact that the elements of religion in what he taught had become forms of worship devoid of substance. The cultivation of the spirit in man through such teaching was impossible, and it was an easy task for intellectual critics to prove that such religious education was reactionary and contemptible. The village teacher was ultimately driven, by this intellectual criticism, to disbelieve his traditional convictions and attachments and the ideal of life based on them. He ceased to be contented with his life of poverty and his lot. Teaching became for him less a mission than a vocation. The moment he lost his stability of mind, he lost his hold on the people. The destruction of the teacher's spiritual influence has meant, especially in rural India, that the people have no moral sign-post left for religious guidance. The intellectualist, in his criticism of religious education, fell into the same error into which the teacher-priest had fallen when he reduced the spiritual essence of education into a set of formal practices. If the parrot-wise performance of prayer is not the cultivation

of the spirit which is the aim of prayer, neither should the practice of routine be confounded with prayer, thereby proving the valuelessness of prayer. Because the teacher had failed to retain the basic spiritual ideal in education, it did not follow that there was no such ideal. The intellectualist, by his overemphasis on scientific and secular education, appeared in practice to deny the need for any religious education. At any rate, during the nineteenth century, science seemed apparently to have elbowed out religion. Because the antiquated teacher had come to mechanise religious education, it was the business of the thinker to rehabilitate it on a truer basis and not to annihilate it. The educated class was so hypnotised by the glamour of the new culture and education that it did not hesitate to supersede the traditional education without selective assimilation of either the new or careful examination of the old. The result was the uncritical acceptance of the one and rejection of the other. The good in the old education which was thus lost was its spiritual basis which had given a measure of stability to Indian life of the masses as well as the classes. Critics may call this stability inertia, but it is certain that a little of "pathetic contentment" which saves people from joining in the scramble for money is a rest-cure when wordly wisdom comes to lie in the unrestrained indulgence of the acquisitive instinct. This unpleasing feature to the extent that it is attributable to the present day education is a part of the socio-economic struggle of the age.

ECONOMIC PRESSURE

The economic influences of the nineteenth century, due to the impact of the West and its ideas, were even more intensive and extensive in Indian education than the cultural and the rationalist reactions. While the minds of the teacher, the taught and the untaught alike

were unsettled by the effects of Western culture, the competitive character of the social and economic order of the West gave to Indian life a new direction. One important result has been the ascendancy of urban over rural India. Competition (economic and social) and urbanisation have profoundly changed the character of every grade of teacher and the conditions of his work. Both have created new wants and desires. The competitive process began from the top; in the teaching profession it started among the university grade of teachers and then spread to lower grades.

It was another instance of infiltration of the mass-mind by the materialistic thought of the intelligentsia. This time the process was of a less admirable character. From the moment the teaching profession was made a part of the civil service, as in government institutions of secondary and higher education, it became liable to the struggle and scramble of an hierarchy. Teachers graded in a civil service were subjected to the temptation of thinking more about prospects than about the problems of education. Among teachers in non-government secondary and primary schools the system of payment by examination results was prevalent. Consequently instruction (and worse, education) was dominated by examinations. The traces of the practice of payment by results of examinations still linger in secondary English education although a teacher's work is now no longer judged solely by the percentage of success of his pupils in examinations. In rural and urban middle schools, the work of the staff is still judged by the percentage of pupils who pass the Vernacular Final examination conducted by the Government Education Department. As an educated youth generally wanted to enter one of the public services, for which an examination certificate was required, even university education and teachers were overborne by the examination system. 'Prospects'

summed up in one word the motive-force of the entire educational world. The word was and is constantly on the lips of the teacher and the taught. The former thinks of advancement because the competitive organisation of the socio-economic order has multiplied his wants and desires. The pupil has followed the teacher's example and the anxieties of his future career in one of the services beset him early in his educational endeavour. The search for knowledge, culture and spiritual insight has attracted only the exceptional minds. It is necessary to examine more closely how secondary and primary grades of teachers have been affected in their life and work by the economic pressure.

The staff of the high schools has been largely recruited from the university men. They have been generally averse from settling down in the village either as high school teachers or as independent workers in agricultural, commercial or industrial occupations of the countryside. For this and other reasons there are few rural high schools. High schools are to be found largely in towns and cities. The city-bred teacher has had no adequate knowledge of the life and needs of the masses of the population living in the villages. Even the growth of communications which have now linked more closely urban and rural life has not aroused in him a consciousness of the wants of the village folk and the appreciation of the problems of rural India. Consequently the contribution of the high schools of the country towards the reconstruction of the rural life of India has been so far negligible. The educated class has therefore grown up without adequate or effective contact and sympathy with the village people. Every high school should have its Rural Studies Circle. Further the teacher's urban upbringing (and even those teachers who come from the countryside have been urbanised during the process of their education) has

made him disinclined to roughing it. He has had therefore neither the inclination nor, perhaps, the means to travel beyond the place of his work and his home where he goes periodically during the summer vacation or other holidays in the high school. As he usually marries and has a family, and as the standard and cost of living in a city are comparatively high, he has appeared to be engrossed in the round of domestic duties, and sometimes the worries of the home have beset him. The routine of his duties in school and at home has consequently claimed his sole attention. In the past, he could seldom continue the process of self-education or take a vital interest in his pupils, outside the classroom. During the last two decades, however, the more energetic or devoted among the high school teachers have shown adaptability and enterprise in their work in and outside the school. Such teachers have now begun to organise excursions, scout-troops, literary unions, study-circles, games and athletics, midday meals and other forms of extra-curricular activity. These activities vitalise the process of education of the pupils and also of the teacher himself. It is an enrichment of his own personality. Of this fact he is probably not yet conscious. From the middle of the nineteenth century, the teacher's influence had been waning; the prestige of the schoolmaster is now rising slowly in the public estimation. By a process of self-education and devoted service he can build the foundations of the edifice of national reconstruction. The majority of high school teachers have still to learn to work as a team in the organisation and improvement of their school. This sense of corporate enterprise needs to be developed, if high schools are to maintain their efficiency and utility in the conditions of today, when growing unemployment has made people discontented, and prone to condemn the present day secondary education. Each

teacher works hard, but for want of solidarity in the school staff, his teaching, by lacking contact with allied subjects, becomes compartmental and ineffective. The headmaster of the school does call periodical meetings of the staff. But general discussion is not so valuable as planned co-ordination of work and correlation of studies which need to be organised under the guidance and direct supervision of the headmaster. Such should also be the organisation of discipline. For an institution to develop such a corporate sense of work and discipline the headmaster needs to be a man of energy and resourcefulness. Generally the average headmaster is satisfied if he is able to conduct his school without overt trouble among the staff and the pupils and to get good results in the High School examination. These are static aims; the headmaster of a high school or the principal of an intermediate college also needs to possess vision of progressive purposes.

One unexplored field for development through the enterprise of the high school staff is educational handicraft as an *extra-curricular activity*. Crafts and vocational courses have been introduced in high schools as formal and practical part of the curriculum, such as science, drawing, nature study, commerce, manual training, and agriculture. They need extra staff, equipment and accommodation and consequently additional expenditure. They have been made examination subjects. What is here advocated is *handicraft, as an extra-curricular activity*, namely, the extension of the ideas and principles of the "Experiments in Rural Schools" to high schools. There should be little expenditure, if the high school timetable is so planned that for half an hour daily some clay-modelling and card-board cutting are introduced in primary classes and cane or wood-work, book-binding or similar craft and gardening in the middle and high sections. The criticism about lack of time

and the multiplicity of other school subjects is considered in the study on the "Experiments in High Schools". No elaborate equipment should be provided, and teachers who are keen and have aptitude may learn to practice some craft as a hobby at home, during vacations. If once the spring of the pupils' play and constructive instincts is released, scholars will acquire skill with little guidance. High school studies will have been fermented with that practical leaven which they vitally need. During high school anniversaries exhibits of pupils' handwork are now usually displayed for the benefit of guardians, parents and visitors. This fermentation may lead to further developments in practical and vocational education in future. Since the middle section and high school curricula are overweighted with literary studies, handicraft should serve as a welcome interlude of an extra-curricular activity.

In order to secure the contentment of high school teachers and to maintain the efficiency of secondary institutions, the thorny question of the pay and prospects of the staff needs equitable adjustment. The secondary institutions which teach English can be classified as government and government-aided institutions; the latter are under private management. There are only a few institutions which receive no grant-in-aid for maintenance from the Government. Teachers in government schools are paid according to time scales of pay. As a class they are better paid than the staff in aided schools. Each aided institution pays its teachers according to its means and inclination. There is a bewildering variety of grades and time scales of pay which is seldom considered adequate as a living wage by the teachers themselves. While schoolmasters in both government and government-aided schools resort to private tuition of pupils to supplement income, private tuition by teachers in government schools is nominally regulated so as not

to interfere with their work in and outside the school. Since aided institutions have generally improved and can now compete with government institutions in efficiency, the justification for the very favoured position of the staff in government schools is being questioned by teachers in aided schools. It has become a source of heart-burning and discontent among the latter. Also since aided institutions are now compelled to employ trained staff, it is necessary to formulate provincial scales of pay for teachers in aided secondary English institutions. The provincial scale of pay should be so framed as to lessen the gap in pay and prospects in aided and government institutions and should save teachers, as far as practicable, from any vagaries of managers. It can be argued that the introduction of a provincial scale of pay for the staff of aided schools is beyond the means of many of the struggling high schools which have no endowment fund but are maintained out of the income from tuition fees and government grant and that conditions vary from place to place and school to school. For a successful introduction of a provincial scale of pay, the provincial Government will need to pitch the scale of pay in government institutions lower than at present,* and only slightly higher than the provincial scale which may be determined for aided schools. One device is the gradual introduction of the scale in aided schools. The minimum pay laid down for each class of teacher should be rigidly enforced and further—should the management be financially in a position to give any annual increment or increments, these should be given only at the rate prescribed in the scale. Government will also have to help the managements of aided schools by special staff grants until they

*Since this was written, a reduced scale of pay has been given to teachers in government schools in the U. P.

can bear the cost of the provincial scale without special grants. It has also been suggested that the government schools should be either abolished or reduced in number. This is an ill-considered suggestion and has been made because the finances of provincial governments have been depleted during the world-wide economic depression the effects of which may gradually pass away or be mitigated in severity. The government institutions have served in the past as models; and the many aided schools now in existence have closely followed the pattern, except in one respect. The great majority of aided schools are denominational in name and the character of their managing body. The government schools serve as little oases in a desert of denominationalism. As such they render valuable service to the community and may ultimately help to wipe out denominationalism in education.

In theory, the provincial scale should apply only to new entrants; in practice inequalities would lead to the application of the provincial scale to the existing staff also. The introduction of the provincial scale in aided schools would relieve the staff of the burden of uncertainty under which they labour, and conduce to efficiency by removing discontent. The present unpopularity of the service in aided schools will decline. There is however a danger that when a teacher has been gradually promoted to the higher salary of his scale, the management may be tempted to replace him by a new teacher who will start at the bottom of the scale. This temptation will have to be checked, otherwise the insecurity of tenure will tend to undermine the efficiency of the teacher. The question is whether private and public sources can provide funds for this necessary reform. A small committee of say three members, consisting of a headmaster or a principal, a school manager and one government official, could estimate the cost and formulate

proposals for the consideration of the public and Government. Elasticity in pay and prospects of the staff in aided schools according to circumstances of each institution means, in actual practice, confusion and inequity.

Provincial governments have already laid down grades of pay for primary and middle school teachers under the control of urban and rural boards or councils which receive grants for education from them. Teachers in primary and middle schools are generally paid according to the grades fixed for municipal and rural schools. The grades vary slightly in different provinces but in the jurisdiction of each provincial government there is uniformity in pay for each class of teacher serving in a municipal or district board school. The prospect of grade promotion has proved a preoccupation and distraction for the village teacher as well. His wants have multiplied, through urban contact. For motor buses now ply between towns and villages. Keen competition and the scramble for better-paid posts have become rampant among all grades of teachers. The old-time contentment of the "guru" is now merely ancient history. The rural school teacher's devotion to his vocation is fitful and his sense of duty intermittent. The fitfulness and intermittance are worse in municipal schools. The reasons are to be found primarily in the lack of direction in the teacher's home life and general training. He has not cultivated the habits which may give to his life the appearance of an ordered planning. The wastefulness and inefficiency of primary education in India have therefore become proverbial. Municipal and rural education authorities have also become notorious for lack of efficiency in administration. But when municipal and rural boards were controlled, before 1919, by chairmen who were government officials, primary and middle school education was static in

character. The crux of the matter is that the primary school teacher, urban or rural, has still to cultivate the persistence in devotion of the old-time "guru" although his modern professional equipment is adequate. The secularisation and rationalisation of education, during the last one hundred years, have equipped him as a pedagogue but have not developed his character which is ultimately the source of his devoted service to the community. He has to be fired with the zeal of an ideal. He has to be inspired with the belief that in his hands lies the task of instructing a whole people (as the basis of an enlightened democracy) and the future destiny of the country. At present his horizon is circumscribed by the burden of his increasing wants and of his vocation. His work is often handicapped by lack of buildings and equipment, and the inefficiency and apathy of his local education authorities. Even his fitful devotion has proved that he is capable of unexpected achievement. The "Experiments in Rural Schools" have indicated possibilities. These experiments have added to the burden of his work; it is possible that they may evoke his persistent co-operation if he finds in them the vitality of an ideal of service. At any rate, the new methods are proving more stimulating to the teacher and the taught and have also appealed to the villager. The newly awakened enthusiasm of the rural school teacher will not prove evanescent if the educational administrator realises that his immediate objective is to help and guide the teacher in this process of awakening.

INFLUENCE OF DEMOCRACY

The ideal of service which will light the flame of devotion and keep it burning in the teacher's breast needs to be wider than the instruction of the people to make them fit for self rule, that is, for democracy. The

advent of democracy undoubtedly makes possible the diffusion of education among the whole population. Its basic principles are however not easily understandable by the teacher while its machinery of representation and the vote have been exploited by and through him in a novel way. First essays in the working of democratic institutions had similar beginnings in other countries. The ideas of democracy have given the teacher a new self-respect (critics call it self-importance) but have not as yet educated him into an equal respect of his neighbour. Democracy requires the development of a strong sense of self-discipline; for otherwise each individual will become a law unto himself. In forms of organisation other than democracy, discipline is maintained largely by an external authority. Hence the teacher has first to subject himself to rigorous self-discipline, before he can maintain discipline in the class-room. The primary or middle school teacher has not so far been conspicuous for either displaying or inculcating among his pupils a strong sense of self-discipline. Strengthening of self-discipline among the teacher and the taught will come in course of time. The Indian teacher and pupil are, as a rule, diligent and easily amenable to external discipline. This had made them submissive even to unjust control. Democracy has had a not unwholesome effect on the teacher and the taught in liberating them from easy submission to arbitrary authority. The present tendency to lack of discipline is a reaction against the excessive curtailment of freedom of thought and action in the past. The principles of democracy which have found expression in the demand for swaraj (i.e. self-rule) have made teachers of all grades, and especially the village school teacher, nationally self-conscious. The pangs of the birth of nationalism in universities, schools and colleges are being witnessed for the first time in India's history.

If these forces of nationalism can be directed by teachers into constructive channels, the ideal of service to the people, as one community or nation, will become ingrained in the mind of youth. If they fail to teach youth this lesson of nationalism derived from democracy, its impatient idealism will become a purely destructive force. Western thinkers now argue that nationalism, even when it knits one community into a homogenous, compact and efficient state tends to disrupt civilisation and humanity, because competing national patriotisms are exclusive and breed antagonisms. This aspect of nationalism need not necessarily be reproduced in India. Her people, like those of China, have been generally peaceable and there is no ground for the belief that a nationalist state in India will turn aggressive. The educationist and the teacher do not therefore need to deflect the course of evolution of an Indian nationalism. Moreover, as nationalism has grown by the elimination of narrower loyalties to smaller units of social organisation like the clan, the tribe and the principality, a federal or international world-state could evolve only out of the units of national states. If political evolution does ultimately take such a course, the super-state would have to rest on the foundation of equity if the world-order is to be truly free, for great as well as small nations, and to command the assent of the latter. The League of Nations does not apparently answer such a description, which accounts for its present inadequacy and ineffectiveness.

The Indian teacher's task is therefore two-fold. He has to make the rising generation nationally self-conscious so that an Indian nation may emerge. In this process, the intensity of nationalism should not be allowed to submerge the wider loyalty to humanity. India's heritage of religion and philosophy have provided the teacher with an ancient tradition on which he can

build a better type of Indian humanity. The essence of this heritage has been summed up in the one word 'spirituality'. The present day leading exponents of this spirituality are Gandhi and Tagore who have attempted to show to the world a way in which the claims of nationality and humanity could be reconciled. The teacher in India has therefore before him personified ideals of service to his people and to all peoples. If he has but faith, he can accomplish his task.

TRENDS IN EDUCATION*

EDUCATION AND LIFE

Where are we heading in education? This question underlies in one form or another the theme of educational addresses and discourses by our distinguished thinkers and men in public life. The preoccupation of our eminent countrymen with the future of our education has further sounded a note of alarm since the post-War period. Public criticism, prior to that period, was directed mainly to the lack of practical character and of godliness in Indian education. That is to say, a partial challenge has been now replaced by a challenge to education as a whole. Our wider criticism is born of our fears. These fears are inspired by the belief that education is ceasing to subserve the ends of growth of the individual as well as the nation in physical, mental and moral well-being. If education is to serve these ends, it becomes clear that the question, stated above, has a vital context. To attempt an answer it is necessary to consider the background of the educational problem, which is nothing less simple than the complex life of India.

INDIA OF TODAY

What are the inescapable facts in India today? A teeming population whose rapid growth is a source of dismay and alarm. Dismay because the people have no knowledge of birth-control; and alarm because we

*A lecture delivered at the Literary Union of the Benares University Teachers' Training College, Benares in 1932.

have failed to exploit and develop adequately the resources of nature in our country to support an increasing population. Stated in such general terms, the facts may appear to present the problem of any other Asiatic or European country, Japan or England. True; the problems of India and Japan or England differ only in degree, not in kind. But the difference in degree is vast; and the factors mentioned operate so decisively as to mark out India as a distinctive entity in the complexity of the problem she presents. Moreover India's strivings for political advancement make her an interesting and speculative study (as regards her future destiny) among the civilised countries.

The two fundamental facts of the Indian situation, namely, the growth in numbers and the lack of work and food for millions of people have given rise to the popular demand for economic planning and industrial development. Since man lives not by bread alone, another need of human nature, namely, spiritual endeavour has also been a dominant note of Indian life. Economic development and spiritual growth sum up the various aims and ideals of India, stated from time to time by politicians and thinkers. What are the barriers obstructing the path of attainment of the goal? External restraint and internal weakness; the former is now simply the lack of political power for the people to shape their destiny, from which flows largely internal weakness. Largely but not wholly! because social sins in India have undoubtedly a long history and have not a wholly political origin. Therefore the attainment of the political status of a selfgoverning Dominion will be only the starting-point (not the finishing post) in the course of reconstruction of Indian life. Nevertheless it will be found on analysis that the external restraint of an alien or indigenous privileged class has been in a large measure responsible for the backwardness of the great mass of the Indian population.

This backwardness takes the form of lowered vitality, which undermines the will to better their condition, and destroys the morale of the people. They have to be roused from this defeatism. How is the Indian, especially the villager, then to conserve his morale to fight his wretched condition? By a determined refusal to accept poverty, disease and sub-human existence as his natural lot in life. He has to be taught the lesson of this resistance, and education is the means to this end—education in the widest sense, not school instruction alone, but the education of precept, example and circumstances.

The problem of India, reduced to its simplest terms, is that she suffers, more than any other civilised country in the world, from three evils, darkness, disease and dire want; ignorance, ill-health and inertia. The last is essentially the cause of poverty. The remedy for these evils lies in the education of the people at home, in school and outside. An agency of education other than the school is indicated below.

THE EDUCATION OF CIRCUMSTANCES

A new educative influence, unseen but potent, is now pervading India. In its essence spiritual, it is providing for the people an education of circumstances. Since and after the Great War, there has been a remarkable awakening of mass-consciousness. The fact has evoked from foreign observers the remark that the East has awakened from its age-long sleep. The mass-mind of India has shaken off its lethargy and this quickening of consciousness is due to the forces released by the War itself, the stress of the struggle for existence and the emergence of great and noble personalities in the public and intellectual life of the country. The message of their lives and strivings is moulding the life of the people and permeating mass-consciousness.

It is the rebirth of this leadership which has provided a valuable education of circumstances for the people. This leadership itself has won world-recognition; Indian leaders in the realms of science, letters and religion have begun to contribute afresh to the collective thought and wisdom of mankind. India can now count by the score her world-figures. Through material suffering and travail of the spirit and the efforts of her noblest sons to relieve the physical, mental and moral agony of the people, she has arrested the attention especially of the West. Further some of the most distinguished of India's leaders have had the ear of the world because they have roused millions of their countrymen and women to the assertion of a self-reliant manhood and womanhood. It has become a popular belief in India that she is probably destined to serve the world through her rebirth in suffering, as she has served in the past through her religion and philosophy. In the single fact of her own regeneration, she has a lesson to convey to the world. India's rising poets, philosophers, politicians, sages, savants and seers are harbingers of her regeneration. It is their influence which should not be left out of reckoning in the education of the mass-mind of the country.

What are the trends of the organisation specifically concerned with the education of youth and the instruction of children? The special features and faults of university, secondary and primary education are so well-known that it is unnecessary to labour them. One has only to consider them in relation to the problem of India, as propounded.

THE STRONG BODY

One peculiar trend (in fact as well as in popular fancy) of Indian education for youth, boys and girls has been the neglect of physical instruction. The parent,

the pupil and the pedagogue alike have exalted the training of the mind at the expense of the body. How far such a tendency had its origin in the other-worldly aims of ancient Indian education it is difficult to say. For in 'ashram' education, physical culture was an important element. Neglect of physique is more probably an inheritance of the scholastic method in education which has become traditionally associated with Sanskrit and Arabic teaching in the pathshalas and maktabas. Latterly, examinations seem to have usurped the central place in the educational system, and have, through this usurpation, led to the neglect of physical education. A Minister of Education once attributed the decline in health and physique of the people directly to education, and made the drastic suggestion in an informal discussion that no child (at least no village child) should receive any instruction before the age of twelve. The expression of such a view is apparently a reaction; its origin is the once popular belief that education generally stunts the growth of the body. Modern psychology does not lend support to this belief, but it is undoubtedly true that defective education is harmful to the health and physique of the child. A moment's thought will show that the foundation of any well-planned education must be firmly laid in physical fitness. This is a commonplace which is accepted in theory and disregarded in practice. There is an urgent need for persistent effort to permeate education as a whole by the Greek ideal of the efficiency, the plasticity and the rhythm in movement of the body. Some will say that efforts are now beginning to be directed to that end—yes, but not as yet adequately or well. Moreover, if education of the mind and body is rightly planned and directed, it has also to be ensured that the Indian child is well-fed so as to benefit by it. The school and the home have to co-operate to provide nourishment for the school child to sustain him through

his work at school. The teacher has assumed that the parent will fulfil his duty to the pupil. The result has been the haphazard arrangement of the sweetmeat hawker selling his stuff to school boys in Indian high schools. However, now many anglo-vernacular schools in the Benâres division and elsewhere have attempted with success the experiment of an organised scheme to provide regular sustenance, out of the games fund of the school, for every pupil. The department of public instruction of the U. P. has approved the scheme for secondary schools. The Education Department has thus accepted an important principle; the scheme will now spread throughout the schools of the country and the problem of school meals may be said to have been solved. The co-operation of the parent will always be necessary; even if the school is willing to shoulder one more item in the burden of the education of the child.

THE SIMPLE LIFE

Another influence of the Indian university and secondary education, now noticeable, is that their product have forsaken the ancient ideal of plain living. The effect is marked less in the actual mode of living than in the unfulfilled desires of the educated class which breed discontent and disillusion. This trend of Indian education is the result of the impact of the competitive civilisation of the West and the mechanistic character of the age. The adjustment of modern needs to the ancient ideal of a simple life is the problem that awaits solution by Indian education. This problem does not arise merely out of a revival of faith in the creed of life of the past; it is thrust upon us by the compelling force of necessity.

The compulsion arises from the previous analysis of the needs of India and the consideration of the means of their fulfilment through education. To serve the

people, the educated class has to develop a new faith in the simple life and the strong body. Without the one, the preoccupation with the satisfaction of personal wants would hinder the mind in its devotion to service: without the other, no sustained effort is possible.

HIGH THINKING

The immensity of the problem awaiting the India of today and tomorrow is such that even the creed of the simple life and the strong body does not provide a complete solution. The platitude, plain living and high thinking, indicates another factor which should be present in a fruitful constructive effort. Our education is not distinguished at present for the quality of high thinking. Because Indian education has lacked the direction of an ennobling ideal, youth has set to itself the aims of personal advancement, and only in a slight measure the ideal of a life of usefulness to others as well. These ends have had the effect of making examinations the dominating factor in intellectual effort. It may be suprising to be told, but is none the less true, that examinations have sterilised thinking more through their effect on the teachers than on the taught. It will be readily admitted that the pupil has to learn to think for himself; but not of himself. Herein lies the function of the teacher; to guide the young to think for himself and not of himself. In other words, youth has to be taught to seek knowledge and to be imbued with the ideal of service. The routine of the schoolroom and the examination-hall has made the teacher neglectful of this task which awaits him. He has now to cultivate the habit of self-examination and self-criticism. Thus only is constructive thought born*.

India needs hard thinking and constructive thought

**Vide* Appendix : On Thinking.

in abundance—more in fact than other peoples—because the tasks which await us in the whole field of education are manifold. University education has proved a blind alley, and the thinkers have to seek a way out in reform, which is at present not discernible. Secondary education has become a veritable morass in which the people are floundering, and although the way ahead is clearer, it is not easy to extricate ourselves. Secondary education needs to be made more practical (and vocational) in character and richer in content to fulfil the needs of varied aptitudes. Progress is slow, principally for lack of funds, and also because inertia has to be overcome. For the education of girls and the adult population the country has scarcely made even an initial attempt. The problems of primary education and the spread of literacy present the formidable difficulties of lack of *adequate* funds and organisation. The condition of primary education shows inefficiency and there is a consensus of opinion that it leads to waste of money through the existence of uneconomic schools and the stagnation of pupils in the lower primary stage. Still a track has been laid down in the evolution of the primary school which could lead to universal primary education, that would be both economical and efficient. These are the tasks that need hard thinking and constructive effort on the part of those who guide, plan or lead, so that through their accomplishment, education may subserve the wider ends of physical, mental and spiritual growth of the people.

THE USE OF LEISURE

Aristotle had, in his day, suggested that education should train people in the right use of leisure. Since slavery was an accepted institution of the time, he had in view only a privileged class. In modern Indian education the right use of leisure has not as yet received

due attention. Those who have some leisure, after the toil for a livelihood, find that their education has not developed in them the capacity to use their spare time well or wisely. Cultivation of varied interests, at school and the university, has not distinguished the educated class. Education in the West has been more successful in developing among the leisured class an outlet for surplus energy in games, sports, horsemanship, gardening and hobbies. The problem of leisure of the working classes is sought to be solved in the West through various agencies, including education. Our educated and leisured class has now learnt to devote itself to social and civic service—this occupation is however more like the choice of a profession or a career than the relaxation sought from work. For the mass of the people, the solution of the problem of leisure will ultimately be found by developing in every type of school interests and occupations discussed in some of the previous studies, which are known in education as extra-curricular activities. But while the duty of the school will be to develop such interests, its efforts *must* be supplemented by the establishment of the working men's clubs, unions, co-operative societies and various other organisations of adult folk for better living, which are the recognised media of a healthy social and corporate life.

THE IDEAL OF SERVICE

The trends of educational thought, or rather the want of them, that have been examined are the non-physical, the non-simple and the non-thinking* bias of education. It would not be too difficult in these directions to retrace steps where one is apt to go wrong. The acid test of the worth of education is whether it

* *Vide* Appendix : On Thinking.

has lighted the flame of a living faith in the ideal of service in the breast of youth, to be kept burning throughout life. If education fails in this, it fails in its prime purpose. That the danger of its failure is real is evident from the cynicism of the age, when disinterested enthusiasm for service is met with good humoured scepticism and when success is measured in terms, not of devotion to the country's cause but of personal advancement and private gain.

EDUCATION IN THEORY AND PRACTICE .

PRACTICE BETTER THAN THEORY

From time to time, unexceptionable principles in education are stated in newspapers, academic addresses and discourses. A fresh viewpoint in the theory of education has some value. A restatement of educational aims and practice however proves generally to be only diagnostic in character. For instance, in many convocation addresses, the faults of university education have been pointed out; and a number of reforms have been advocated in general terms. Similarly, the shortcomings of secondary education, the needs of the education of the masses and of girls have been reiterated too often. Agreement on abstract principles is neither difficult nor enough; it should lead to action for which funds as well as united and persistent effort are required.

The question of funds makes the difficulties of educational reform almost insuperable, at least for a considerable period. Now, more than ever, therefore an ounce of practice is better than a ton of theory, especially when mere theorizing has become futile.

REFORMS WITHOUT RUPEES

Within the limits of action possible under the slogan "Wanted Reforms without Rupees", certain measures attempted in the schools of the Benares division have been found to be practicable. Now measures we have without money, but we cannot do without men. If we have not the money, we should at least be able to

mobilize the efforts of men; and in this task the press could help us a great deal.

RURAL SCHOOLS

The integration of an educational programme of intelligent instruction, physical culture, crafts, gardening and agriculture, and other extra-curricular activities attempted in village schools and described in the previous studies could, if it becomes widespread, possibly reform rural education and, what is important, it would entail little expenditure. This reform could integrate the school itself into the life of the village. The village school has been in the danger of functioning in an atmosphere of unreality, divorced from the needs of village life. The increasing uselessness and sterility of our educational effort for the village folk is due to this unreality. If the child learns to do in school some of the simple tasks of the life around him, he acquires during his plastic years a vivid meaning of his existence as a social and economic unit of the village community. Incidentally, such tasks provide an effective and modern method of education of young children. Once the rural child and teacher learn to bridge the gulf between the village and the school, the latter will become the centre of community life for all sorts of corporate action and propaganda—for developments in agriculture and cottage industries, and improvement of public health and welfare. Education in Soviet Russia has, in fact, made the school such an effective instrument of social solidarity, with one additional feature that the village school has also been made the training ground for Communist doctrines. It is however no part of a sound educational theory that the integration of the school into the life of the community should mean the inculcation of any species of political doctrine; although the temptation to do so is obvious.

PHYSIQUE AND PROVISION OF SCHOOL MEALS

It has now been realised that there is an urgent need for conservation of physique and physical culture in the schools. If harm was done when the curriculum in schools was not heavy, it is easy to imagine the havoc that will be caused by an increase in the scope of studies. During the last decade an organisation with a personnel (admittedly inadequate for lack of funds) has been created by the U. P. Government for effective and modern physical instruction in schools. This scheme of physical instruction has forced the fact prominently on our attention that, if it is not to prove an additional burden in the curriculum of education, and do harm instead of good, it should be conditioned by the essential safeguard of adequate feeding of the child or youth. The heads of educational institutions agree that even the best efforts of the home in feeding the child have not proved adequate.

Experiments tried in several schools in the Benares division and elsewhere for providing a simple daily meal for each pupil during the school hours established two things. It was possible to make effective arrangement, without prohibitive cost, for feeding every scholar and that the pupil so fed did not droop or feel drowsy and inattentive during the second half of the school day. As a result of these experiments, the U. P. Education Department have issued a memorandum outlining a scheme intended for adoption and guidance in secondary schools including municipal and district board middle schools. The scheme has been adopted in all such schools and has proved popular. With the experience gained, it should not now prove too difficult to extend it to primary schools. This measure has the merit of low cost, simplicity, practicability and of laying the foundations of education; the last in the sense that the

physical well-being of the child is the only foundation on which the structure of the mental and moral well-being of the pupil can be raised by the educator.

CO-EDUCATION

Another practicable measure in education which does not need immediate expenditure of much money is the realisation in practice of the widely accepted principle of co-education in primary schools, especially in village schools. Public opinion has generally accepted the custom that girls can receive instruction in schools along with boys, upto at least the age of 11 years. Government have given their official sanction; and yet the number of girls reading in boys' primary schools is still 'negligible'. In the village there seems to be apparently no incentive for parents to send their girls to schools. Nevertheless such an incentive has to be created—even if we have to appeal to the villager's self-interest by suggesting that in education lies a possible opening of careers for girls as school teachers and trained nurses. If the number of girls reading in boys' primary schools increases, there would be no immediate need of increasing the staff of primary schools. Our rural primary schools tend, on the whole, to become overstaffed. Consequently there is room for the absorption of girl pupils, without an appreciable addition to the cost of maintenance of these schools for sometime.

WAYS AND MEANS

In at least these three directions, namely, in rural, secondary and girls education it is possible to make an advance. The question arises; wherein lies the difference between this exhortation and other similar propositions. The difference is briefly this: sound propositions are often stated in too general terms to yield guidance for concrete educational practice; almost always they mean

additional expenditure and they have first to be accepted by the educational authorities and the Government. The measures advocated above happily fall within the framework of official machinery, are consonant with public opinion and conform to people's needs. That is to say, they can be worked into the existing organisation by the available agency with little or no expenditure. It remains to be seen whether the necessary effort could be mobilized for corporate action.

QUO VADIS ?

FORMULATION OF IDEALS

The foregoing studies, while intended to be self-contained on the particular aspect or aspects of education discussed in each, have yet an underlying unity given to them by the specific viewpoint or creed in education unfolded in the following pages. This unity is not the unity of the links of a chain, joined each to each in a connected sequence, but rather that of the beads of varied colours strung on a single thread of common purpose. The exposition of the specific viewpoint or creed in education is not the result simply of a retreat into introspection and is further not intended to be merely an intellectual exercise for educationists. It is a profession of robust faith born of practical experience on which, it is believed, a dynamic technique of education can be founded, and an appeal to fellow-workers in education to make constructive efforts to realise it in practice, if they accept it in theory. Various attempts have been made by educationists, thinkers and philosophers to define education. What we want at present is not so much a comprehensive definition of education as the formulation of ideals that should guide us in planning our education, and this, it is submitted, the present study endeavours to do.

“EDUCATION FOR THE SAKE OF EDUCATION”

EXAMINED

A euphonious slogan which gains currency for short periods, now and again, is “education for the sake of education”. Before formulating certain ideals in

education, it is necessary to examine this one-time popular view in Indian education. On this view, education being an end in itself needs no other definition. Or its definition is in the nature of a description of a self-directive process. Since the ends or aims of the process are presumed to inhere in it, there appears no need to search for them. This apparent simplicity leads to a false view of the function of education. The process of education conducted for the sake of education would tend to produce book-worms, scholars, at best men of culture and dilettante philosophers. Even when it is assumed that a many-sided education has been planned, its product will be accomplished men of culture, if that education has no end beyond itself. Apart from the fact that for the common people, that is for the vast mass of average humanity, this sort of education could only make them unfit for their allotted lowly or routine duties of life; even the men of culture will be concerned more in the further pursuit of self-culture than in effective participation in the life around them. Cultivation of the self is a laudable object, provided that the self finds expression in action which is not directed solely to the culture of the self. Effective participation in life means a continuous process of enrichment of the self, but when the self recognises no needs outside itself, it ceases to be dynamic. Education for the sake of education is productive of an attitude of philosophic detachment to life: this is indeed the natural consequence of such an education at its best. For the "native hue of resolution becomes sicklied o'er with the pale cast of thought". Non-action is the attitude not of the scientific mind but of the dilettante and the aesthetic sybarite. The scientist and the philosopher are preoccupied respectively with the physical and metaphysical problems of the universe, not with self-culture. The pursuit of self-culture is the

passion of the dilettante, science and philosophy of the positivist. The psychological distinction between the dilettante and the positivist is expressed respectively by the terms introversion and extraversion. Between the self and the environment, as two entities, there is continuous interaction. In an introvert this interaction is firstly reduced to a minimum, secondly its ground is the self. The range of interaction can never be too wide for an extravert; and it extends over the whole field of environment mastered and moulded for the service of man.

Philosophy and religion provide notable illustrations of the type of men who consider all action fruitless. Diogenes living in his bath-tub and Simon Stylites on his pillar are extreme examples respectively of the philosophy and religion of non-action. In Indian philosophy and religion the "Sannyasin" is the ideal of those who preach the gospel of individual salvation through solitary contemplation. Such meditation is an experience which is said to bring the self face to face with divinity and ultimately merge it into the latter. These viewpoints in philosophy and religion are reflected in the theories of education. The first and most noticeable effect is that widespread diffusion of education is considered unnecessary; because the ideal of life spent in a bath-tub, or lived on a pillar or on the Himalayas is a choice only of the elect. Philosophic and spiritual insight are the heritage of the few. The existence of a limited intellectual class, which alone needs to be educated, is assumed. The vaster non-intellectual mass of people is relegated to be hewers of wood and drawers of water. Aristotle divided human beings into two such classes and prescribed an education for the right use of leisure. Self-culture was the aim of education. Since slavery was a recognised institution of his day, Aristotle fell into the error of believing that people

could be divided into two sharply defined classes, the intellectuals and the workers. Modern democracy has made such a division impossible, as there is room for infinite flexibility among human beings, even if the classification of the intellectual and the worker is still retained. The worker is educable within limits; and the intellectual is capable of pure thought only within limits.

Indian education has not, as commonly believed, suffered from the shortcoming of not having been conducted for the sake of education. It has, contrary to popular belief, erred precisely in being too much an education for the sake of education. How else can the facts be explained that rural and urban education have been alike in character, that no allowance has been made in the education of boys and girls for differences in sex and that in secondary education no provision has been made for varied aptitudes? Education in the rural school has taken no account of village life, and in the urban school of the practical, commercial and industrial pursuits of the town and the city. The children and youth, irrespective of sex, age, intellectual capacity and natural or inherited aptitudes have been cast into a uniform educational mould at every step of the educational ladder, from the primary to the middle school and from the latter to the high school and the university. The objectives in Indian education have been to pass an examination and to seek "service". These objectives, however, do not account wholly for the peculiarities of the educational system. Modern education, in every country, has an examination system. The search for employment after obtaining a school certificate, college diploma or university degree, has been undoubtedly a dominating factor in dictating the method and organisation of Indian education. But an examination of the content of education would reveal the underlying

bias, not always consciously expressed or recognised, of education for the sake of education. The curriculum is framed on the plan of what is known as a liberal education. Languages (English being assigned the first place), mathematics, sciences, (natural, metaphysical and social), history and geography have been the quintessence of liberal education. Even the fine arts have had to gain admittance through a back-door into the scheme of this education, because they were first practised in India by professional artists and musicians. The syllabus is severely scholastic because it has been assumed to have the merit of being the foundation (not merely of liberal education but also) of general education, a conveniently vague term, which was however supposed to distinguish a "gentleman". During the latter nineteenth and early twentieth centuries, this word was constantly on the lips and in the minds of youth at schools, colleges and universities. Although the word is no longer as over-worked as it used to be, it still dominates urban secondary and university education. The word and the idea appear to have been current, at one time, in England as well, and the doggerel ran, "When Adam delved and Eve span, Who was then the gentleman." A serious evil in India is that certain of these false notions concerning a gentleman's education have penetrated into rural middle and village primary schools. The consequence has been that the village youth has acquired a distaste for rural life, because to become a "gentleman", he has to shed his rural upbringing and forsake his village pursuits. That is in the process of becoming a gentleman he wants not only to become urbanised but to learn nothing at school which may derogate from the supposed behaviour of a gentleman. Manual occupations were therefore, until very recently, entirely neglected in village schools. The demand for learning English has been keen and excessive. This educational creed of becoming

a "gentleman" is reminiscent of the aim of education for culture, an inheritance from the Aristotelean tradition of education. Indian education is therefore conducted largely on the basis of an aim which it is commonly supposed to overlook. General education is wrongly assumed to be "liberal" because it has no contact with the life of the common people.

FOUNDATION EDUCATION AND TEACHING OF CRAFTS

Yet a clearer conception of general education should lead to the adaptation of rural education to the needs of village life, and secondary and university education to the needs of the city and the country as a whole. It is true that a certain amount of foundation education, upto the age of eleven or even fourteen years, is essential and it should not be mixed up with any scheme of vocational, trade and technical education. It has, however, to be expressly recognised that foundation education must include the elements of hand and eye training, which also enter into a scheme of education for practical trades. The experiments of Soviet Russia in the field of education do not support even the view that foundation education and education for a trade should not be mixed up. Primary education in Russia is so planned that a school becomes an adjunct to a factory or an agricultural farm. The child thereby imbibes the Communist doctrine from the earliest stage of his career, and also becomes a more efficient unit of the Communist State. American democracy has also evolved an educational theory, associated with the names of Dewey and Kilpatrick, known as the Project method of instruction. The Project method in education is not as thorough-going as the Soviet experiment in its attempts to centre instruction round the economic and industrial units of the state, but it is founded on the establishment of as many and as varied

contacts with the corporate life of the child as possible. *School tasks, that is to say, should be embedded largely in the life-tasks of the child.* Indian education has been planned, since the middle of the nineteenth century, on the Western model. As usual, it lags behind advanced theory in Western education as exemplified in Soviet Russia and the United States of America. The recent Punjab University Inquiry Commission has, on the other hand, come to a contrary conclusion.

“LETTERS” *versus* CRAFTS

It has expressed the view that teaching of craft alongside learning of letters is a distraction for the pupils, who consequently fail to retain literacy after leaving school. It is, however, noteworthy that the provinces of India other than the Punjab, where teaching of craft alongside letters has not been developed, do not show appreciable advance in literacy over the Punjab. The Hartog Committee on education in India dilated on the general inefficiency and wastefulness in primary education throughout the country. The craft teaching in the Punjab does not inherently lead to loss of literacy. The explanation, assuming that the conclusion is correct, may be found in the lack of co-ordination between the teaching of craft and letters. If a primary or middle school is converted into a craft school through excessive teaching of the craft, the lack of letters must be the result. Experiments in rural schools in the U. P. have shown that, as between craft and letters, it is an uphill work to wean the teachers from working away the whole time in school at the teaching of letters. Pupils do take delight in spontaneous activity in the garden or at handicraft. If the distribution of time between craft and letters is well-planned and adhered to, there should be no apprehension of loss of literacy through “distraction” of craft.

EDUCATION AND THE CATEGORIES OF LIFE

If then "education for the sake of education" is false in theory and harmful in practice, it follows that the right sort of education must be the means to an end other than itself. The process of education must obviously mould the present and the future life of the child or the adult whom it seeks to educate. In a general way, to influence the life of the educated is the concern of education. To put the end of the process so broadly yields no guidance to the educator. On the other hand, the attempt to define education has its pitfalls. If life, worthy in purpose and complete in content, can be analysed into categories which education can directly influence, some sort of a technique of education could be build up. Three such categories which make up the sum-total of a worthy and complete life are discernible. They are sanity of mind, determination of will and quest of the spirit or adventure of the soul. Sanity of mind will comprehend all the desirable qualities of the mind such as clarity, common-sense, shrewdness and balance. Sanity of mind is however not enough. Its possession alone, without the strength of the other two ingredients, namely, the will and the soul, may manifest in the possessor a philosophic life, not a life of action. Dynamic energy is needed to move a sane mind to action. Without the vigour of will the best balanced mind is apt to prove sterile, pure thought by itself being not conducive to action. *Sanity is the cognitive and energy the conative aspect of the mind.* Without an admixture of both, in proper proportion, character would not be well-balanced. Assuming the presence of both, sanity and energy, in the make-up of character, right direction or purpose is needed for complete living. History records notable examples of great soldiers and conquerors who displayed genius in the sanity and

clarity of their thoughts and the determination of their wills. Yet their life lacked direction of a purposive sort. Direction or purpose must have reference to an ennobling ideal in life. Now every sane person's mental and physical activity are purposive in the sense that they are directed to some proximate ends which will serve the goal in life that the individual has marked out for himself. Usually, the goal is achievement of success in undertakings for the acquisition of riches, power, position and prestige. The undertakings may be conducted through fair or foul means or both. Wealth has occasionally been made honestly, also the rise to power has been accomplished through fair dealing, although rarely. Therefore what is popularly known as success is not necessarily incompatible with honesty—even with a high moral purpose. Generally however devotion to self-advancement blunts the moral sense, excessive desire for personal aggrandizement or success leads to its entire eclipse. In lesser men, ambition, greed and cunning are found to be the ruling passions of life. Among the great, megalomania is an exaggerated form of extension of the personal ego. An Alexander dreams of world conquest and supremacy. A Nero becomes drunk with attitudinising and the idea of his own greatness. A Byron has bequeathed to English literature the Byronic tradition and to the vocabulary the word Byronism. Croesus has passed into a proverb.

* THE IDEAL OF DISINTERESTED ACTION

What is then the ideal of life which will make the individual's life complete in content and valuable in purpose—the touchstone which should regulate the lives equally of the great, the mediocre and the lowly? This touchstone cannot be the magnitude of achievement. Because the ideal has to be universal and the

strivings of only the few among mankind reach the level of greatness. Not conscientiousness in endeavour, not even moral purpose, constitute adequate guides for conduct in order to satisfy the spiritual as well as the material cravings of life. "Honesty is the best policy" has been the exhortation for material ends. If, therefore, conscientiousness and moral purpose serve no more than these ends, they will ultimately fail to satisfy our innermost cravings. That which has proved in the profoundest experience of human beings to be most satisfying is disinterested action. In the measure that the main-spring of a human life is disinterestedness, would that life be of value not only to the community but rich in spiritual fulfilment to the individual. In disinterested action is to be sought that ideal of life which would assign to every human being, lowly or great, a measure of living rounded in content and ennobling in experience. In thus fulfilling himself, the individual will enrich the common life of humanity and its spiritual heritage. This ideal of disinterested action will satisfy the quest of the spirit or the adventurousness of the soul which was reckoned as the last, the final category of life. It is the business of education to bring about this fulfilment. Disinterestedness is an eminently practical ideal. It may be present in a slight measure, in the beginning, in the individual's undertakings, which may be directed mainly to personal ends. As practice makes perfect, an increasing measure of disinterestedness will gradually burn up and purify in the crucible of its own fire the grosser elements of the ego. *This ideal of living provides for gradualness of perfection. It takes cognisance of human frailty, and yet pins its faith finally on man's striving.* This description of spiritual endeavour is not new in the East; it is more than 5,000 years old. It is the lesson which Krishna preached to Arjun on the battlefield of Kurukshetra and is the central theme

of the Bhagwat Gita. It has been recognised as a commonplace that the human being is swayed simultaneously by personal and impersonal desires. The interplay of material and spiritual forces is complex. If a person can learn, even in gaining personal ends, to display a measure of disinterestedness in his or her actions, the process of the person's regeneration has commenced. The difficulty lies in making the person realise, firstly that disinterestedness yields a reward, less material, but more satisfying in actual experience. Secondly he or she has to learn to subordinate personal desires in order to create and fulfil the cravings for this new experience. The experience of disinterested action is so satisfying that if it is occasionally realised, its further realisation becomes a pleasurable endeavour. This effect makes the conquest of the ego and the fulfilment of the disinterested-self easier. There is a trite saying that virtue is its own reward; otherwise the practice of virtue would have been still more difficult than it is.

EDUCATION AND PERSONALITY

The analysis of the sum-total of a life, satisfying to the individual and the community, has yielded the fragments of personality as sanity of mind, determination of will and quest of the spirit or adventure of the soul. Education is concerned entirely with the development of personality—with the integration of these fragments into the whole of personality. This viewpoint or creed in education will yield a workable technique since the material on which the educator has to work are the well-known trinity, the mind, the will and the spirit. The body and the emotions of the child are also important; but in the context of the problem of education as here considered, they are subsidiary.

INDIVIDUAL AND THE CITIZEN

The question arises, will the technique be employed in the education of the individual or the citizen, following the distinction of Bertrand Russell. If the concern of the educator is to develop and unify in men and women the integrants of personality namely, sanity of mind, determination of will and culture of the soul, the result apparently would be the education of the individual. Will the state be reconciled to an education which does not inculcate directly the lessons of its own particular doctrines of patriotism, nationalism and devotion to the country, king and God? In the education of the individual, sanity of mind and culture of the soul are possible, while in the education of the citizen his mind has to be fed on a certain amount of "dope" (to use an expressive Americanism). Economic, social, moral, religious and political doctrines, which will subserve the purposes of the state, are sought to be inculcated among the people through the education of the child and youth. Soviet Russia has expressly made its primary education the training ground of the Communist doctrine. These doctrines may be, and often are, in conflict with truth and the wider interests of humanity. Consequently sanity of mind and culture of the soul are possible, in State-education, not absolutely but in a diluted measure. Education in modern states is therefore a compromise between the education of the individual and the citizen. There is no inconsistency (merely a half-way house) between the position of state-controlled education being in the nature of a compromise and the proposition about the ideal of education being the integration of personality for the fulfilment of a life of disinterested action. For perfectibility in disinterestedness is inevitably a gradual process. Human nature has its roots in animal ancestry,

consequently achievement of disinterestedness is the progressive ascent of the human soul from the animal to the divine.

DISINTERESTEDNESS AND THE GROWTH OF SOCIAL
AND POLITICAL ORGANISATIONS

Social and political organisations exemplified (respectively) in the nation and the state have evolved from smaller units such as the tribe or the principality. This evolution has been made possible by the broadening of the narrower loyalties of the individual to his tribe or clan, and the consequent transfer of his allegiance to a wider form of community life. Such an evolution must have been preceded by a tremendous growth in disinterestedness of the individual. Disinterestedness of the individual, that is to say, would now embrace the common good of his people or nation. He would be ready to sacrifice, or at least to subordinate, his private interests to the public weal. If it can be made possible to extend individual and social disinterestedness so as to transcend geographical boundaries and political frontiers, the need for distinction between the education of the citizen and that of the individual will cease to exist. The growth of social and political organisations and of disinterestedness are interdependent evolutionary processes. A wider community life is not possible without disinterested action of individuals and the existence of a world-wide social and political order would provide unlimited opportunities for the practice of disinterestedness, which can grow only through constant exercise.

A creed in education has been stated and some sort of a workable technique has been sought to be evolved. The preceding studies in this book are an exposition of the technique; and as previously stated, underlying them is a faith born of practical experience.

APPENDIX

"ON THINKING"*

There is a popular belief that the thought processes of great men and thinkers are governed either by special laws or by no specific laws of the mind. The birth of great ideas, that is to say, is a mysterious process beyond the understanding of common men. This belief is, therefore, a comforting excuse for mental laziness for some people and is productive of a sense of futility in others who wish to think for themselves. It is however only a half truth to say that original thought is not subject to the conditions which regulate the elements of thinking. It is true that merely practice in elementary thinking or even cultivated habits of thoughtfulness cannot make mediocre people great thinkers, as the apprehension of philosophic or scientific truth and, at their best, poetry, sculpture and painting partake of the nature of intuition. Still a great deal of original thinking in literature, philosophy, science and art is based on principles of thought which govern the lesser achievements of men. Carlyle's dictum that genius is an infinite capacity for taking pains was a recognition of the fact that in the highest, as in the simplest, thinking the same elements enter.

What are the conditions which regulate the elements of thinking? In a sense there is no cessation of thought in our waking moments except when momentarily we gaze on vacancy with our mind a blank; when we look

*A lecture delivered in the Hindu Hostel Literary Union, Allahabad University, in 1929.

but do not see. Great grief or sudden shock may also paralyse thought. But these conditions are exceptional and the recall to the reality of our surroundings is generally speedy. Even in sleep dreams sometimes reproduce fantastically our train of thoughts. Thought is therefore, with these momentary exceptions, a concomitant of consciousness. This statement about the character of thought is not a definition. Psychologically it is not easy to define thinking. In popular meaning, however, thinking is a mental process which produces a sense of effort, of strain in consciousness, although in moments of successful mental activity, the flow of our thoughts may be effortless. For the present purpose, the character of thinking in this its commonly accepted sense, and not the psychological character of thought as a concomitant of consciousness, will be under consideration. To set a person thinking in the purposeful sense, there must be a situation or problem, arising from the person's life activity, engaging his mind. There must be not only something to think about—if it were merely that day-dreaming or any vagary of the mind would be ranked purposeful or serious thinking—but that something must be worthwhile in a vital sense. To say that a person is wrestling with a problem or is engaged in a practical undertaking is to say that his attention is directed towards its solution or success. The process of attention, moreover, looks both backward and forward. Attention searches for precedents from the past or falls back on experience of similar or allied situations which would enable the thinker, through association of ideas, to find the solution to his problem. This action of the attention-process upon the past, however, depends upon the person's power to recall the traces of his previous experience. The power of recall is called memory and varies indefinitely with individuals, and to a much smaller degree

in the same person at different times, but some degree of it is possessed even by idiots. As a result of disease or shock, there may be a sudden loss of memory in a person when the whole body of traces of past experience is lost beyond recall. The loss of memory may be either temporary or permanent. In either case there is a complete break, a discontinuity in the person's mental life and he becomes wholly or partially incapacitated from serious thinking.

The capacity of attention to utilise traces of past experience preserved in the mental structure of a person is not limited to the direct personal experience of the thinker in his own life but can range over the whole body of experience of the race embodied in literature, history, sciences, art, philosophy, institutions and laws of humanity, in fact, "over the whole choir of heaven and furniture of the earth," *provided* (the proviso is important) the person has through the alchemy of imagination made race experience an integral part of his mental equipment. The function of imagination in thinking is therefore to enlarge in space and time the individual's capacity to share in the life-history of the race and to give meaning to experience which could not, from the constitution of man, be otherwise direct and personal. Imagination has in this sense, therefore, a re-creative function. Without it our mental life will be neither vital nor alert and the experience of the individual by losing its vividness and enrichment through lack of imagination will lose its value as an instrument of pure thought or of future constructive mental effort required for practical undertakings. One common criticism against Indian universities, until recently, was that they did not develop among the students imaginative insight which would enable them to make the work of great thinkers and men a vital part of their mental equipment. The universities, that is to say, have been

purveyors of knowledge at second hand and have failed to teach wisdom which is learnt in the school of experience from either direct participation in the life of the present or from personal realisation through imagination of the life of the past. There is another function of imagination of which mention will be made later.

How does the attention-process look forward? It had been stated that in serious thinking there must be a problem or practical undertaking, arising from a person's life situation, to engage his attention. The problem or practical undertaking, if worth-while, has invariably a bearing on the future of the individual. It is only one link in the chain of his activity towards the attainment of his life's ambition or goal. The phrase 'goal' in life has a future connotation. Individual ambition may take any form—success in an examination for the choice of a life career, pursuit of wealth, rank or power, religion, philosophy, science or art. The future significance of a person's serious mental activity is never entirely absent from his mind. He may not necessarily be constantly conscious of this compulsion of futurity. When one is engaged in the solution of a mathematical problem or in writing an essay, his attention is apparently taken up with his immediate task, but in the fringe of attention a subtle factor, the meaning that his present activity will have on his ultimate aim, can be detected. Sometimes this shadow of the future is more explicitly present in his attention. If the person becomes absorbed in the solution of the mathematical problem or is carried away by the interest of the theme on which he is writing an essay, the fact that his task is a part of his university education in preparation for his life career, may recede into the background of his attention, but if he were doing these things in an examination hall and his mental activity were somehow impeded, the consequences of

his failure will suddenly become horribly vivid; in fact they may occupy the centre of his attention so wholly as to paralyse his mental activity. It will, therefore, be clear that even our absorption in a task cannot escape the dictation of the future. Indeed without such dictation there will be no direction in the activity of attention towards an end, near or distant. In the words of the poet, we look before and after and pine for what is not.

What form does this shadow of the future take in the attention of the person engaged in a serious problem or undertaking? Attention with the aid of imagination projects a picture, clear, floating or vague, not necessarily visual, of the thing to be, of the desired end. This mental projection of our future aim, with the aid of imagination, may be explicit or implicit; the point is that it determines markedly the direction of mental activity at a particular moment and from moment to moment. Why does attention recall one set of past experiences, individual or racial, rather than another? Clearly because they serve our present and future purpose. Shah Jehan, when he conceived the project of building the Taj Mahal, as a monument to the most beloved of queens in history, had surely a floating picture, however inchoate, in his imagination of the form that he wished to give to the commemoration of his great love. The imaginative picture clearly determined the direction of his mental activity for a number of years until that dream in marble became a reality. In this sense, therefore, imagination has a creative function in thinking. This creative function of imagination is however destroyed if it runs riot. There is a story in the Arabian Nights of a young man who set up as a merchant by hawking in the bazaar his collection of crockery. Business being dull, his attention wandered into the pleasant paths of day-dreaming and in imagination he saw his business

grow until he became so wealthy as to aspire to marry the Caliph's daughter and ultimately to win her. Unfortunately his imaginative flight led him further to show his mastery over her as a husband—on the principle of "gurba kushtan roz awval bayad" (or taming the shrew)—by spurning her on the wedding night. The kick instead of encountering the lovely form of the princess resounded with a crash against something hard and brittle and our young man awoke to the reality that his career as a Chinaware merchant had ended. Which of us has not, at some time or another, built castles in the air? This castle building in the air is merely a play of the imagination and should not be confounded with its creative function.

The attention-process takes account of the past and the future as aids to the present. The main pre-occupation of the mind must clearly be the solution of the problem or the success of the undertaking engaging it at a particular moment. If one's attention is carried away by the contemplation of the past or lingers pleasantly in the dreams of the future, this mind-wandering will impede his mental activity and he will have to drag back attention again and again to the immediate task. The complexity of the attention-process consists in the fact that while the past and the future should, in varying degrees, constitute the fringe or background of attention, the present should occupy the forefront or focus of attention. The inability of scatter-brained persons to keep to their task or to their point is the cause of much energy being wasted by them in exerting the power of will to recall and to concentrate their attention on the occupation of the moment. While a person's attention should be focussed on the problem or the undertaking in which he is engaged at any particular time, his attention should vary from point to point and aspect to aspect of that occupation. He must consciously and

deliberately examine the problem from different points of view; not only because such examination will lead him to a solution, but also because it is impossible to keep his attention fixed on one feature of a situation for long. We may try to fix our whole attention on a dot on a piece of blank paper, but we cannot hold it from wandering after some time. It is therefore clearly desirable that by an act of will, attention should wander round the problem rather than away from it. That is what is meant by looking at a thing from all points of view.

How does one think out the solution of a problem or the plan of an undertaking? To concentrate attention through force of will on different aspects of his occupation is one factor; to select from his past experience, real or imaginative, generally by trial, the particular past experience or combination of past experiences which will meet the new situation is another. The two factors constitute the crux of thinking of the majority of human beings. Most of our thinking, that is to say, proceeds on this method of trial and error. If a word in a sentence is a misfit, we try another and another until we have found the right one. If a sentence or an idea is not happily worded we recast the sentence until it expresses our meaning correctly. If we fail to solve a mathematical problem by one method, we try another. In constructing a machine or painting a picture, we alter the parts or the whole until we are wholly or partially satisfied with the result of our efforts. In building a house or erecting a bridge we plan, modify, construct, destroy and rebuild. In happily gifted or well practised minds, the margin for error becomes very small and the happy word, the right thought or course of action is suggested without a trial, with the effortless ease of intuition. Intuition is simply immediate apprehension by the mind without reasoning. Intuition

is therefore that occasional activity of rare and great minds which gives to their thinking the quality of a flash of lightning. Intuitive apprehension has no room for the method of trial and error in thinking: it is independent of it. It is a sort of sixth sense of the mind. Even in the greatest thinkers it is only a rare form of mental activity. Napoleon was reputed to have known the bore of every gun in every fort in France, his exposition and practice of the science of war would consequently have seemed of the nature of intuition, whereas it was the art of the expert carried to such perfection that the margin of trial and error had been reduced to a vanishing point. Although it is difficult to say, even in Napoleon intuition must have been only the occasional manifestation of the heights of his genius. Many great writers are reported to be so particular about their writings that they write and rewrite them until they have refined their thought and expression to their satisfaction. In reducing thinking to its lowest terms, namely, the method of trial and error and thereby banishing the apparently formidable nature of thought, an attempt has been made to create a message of hope for many of us, so that we may learn to think for ourselves. If thinking generally proceeds by the method of trial and error, there must be one important factor present in it (which is really inherent in the method), namely, "the will to think". Tenacity of purpose is required to keep the direction of attention in the channel of fruitful mental activity and to persevere in trial in spite of errors. This is merely the statement of the fact that force of will is the vital factor in the make-up of our thought as it is of our character.

The correctness and soundness of a person's thinking—of the solution to his problem or of the decision in his undertaking—depend upon a certain activity of his mind which is called judgment. Judgment is that

synthetic process of the mind which strikes a just proportion between part and part and between the parts and the whole, thereby preserving the unity of the whole in the thinking process. Our judgment will determine what ideas should be emphasised in an essay and what should be the length of the parts and of the whole. In a practical undertaking, judgment dictates the choice of one course of action in preference to another. Sometimes the alternatives are so evenly balanced that the right choice becomes a matter of happy accident. In momentous issues, the judgment of warriors and statesmen has determined the fate of nations and the course of history. Judgment ripens with age and, within limits, can be cultivated by habitual exercise.

To give a resumé of the elements which constitute thinking. It should be distinguished from the mere consciousness of our waking moments. There must be a problem or undertaking arising from a person's life activity to engage his attention. The mental activity called attention makes use of the past and the future to resolve the difficulties of the present. Attention can recall the past to aid the present because we have memory; and it can both vivify the past and project the future because we have imagination. Imagination has a re-creative and a creative function in mental life. From the constitution of man, the range of his direct personal experience is limited in time and space. He can however share in imaginative experience the hopes, fears and loves of men and women in the pageant of history or the life of peoples in other lands and other times. In its creative function, imagination projects as a picture or a shadow (to serve as a guide for present action and consequently to give it direction) the reality of the future. Force of will keeps attention in the channel of fruitful mental activity of the moment. Attention thus

driven by will to occupy itself with the immediate task revolves round it. Attention thereby revives, sometimes after frequent trial, the past experience which will meet the particular situation. From this analysis the simple and rather surprising fact emerges that the crux of thinking is that homely saying "Try, try, again". A person may have a defective memory and may be lacking in imagination, but if he has tenacity of purpose, he will overcome these handicaps. In addition to this tenacity of purpose, if he has developed that synthetic activity of the mind, sound judgment, he shall possess the necessary elements of higher thought. Rather unwisely, the above is an attempt to reduce that complex mental function, thinking, to a formula, a rule. We must therefore expect an exception to the rule. Intuition, or intuitive apprehension, or intuitive judgment, provides that exception.

The interplay of these elements in thinking can be illustrated from the different branches of university studies or from practical undertakings. In the study of mathematics, one has to concentrate attention, through effort of will, on the problem and to try one method after another to obtain its solution. Memory supplies in the formulae the methods. The exercise of judgment is needed to choose the right formula. Although the play of imagination is absent or negligible in ordinary mathematical thinking, the imagination of a Newton or an Einstein is needed to span the universe. In scientific studies, the same factors are present. In addition, attention has to be directed to a multiplicity of individual facts; observation should be both keen and minute. Darwin's industry was unflagging in the observation and collection of facts on the interaction of heredity and environment, and he thereby formulated his theory of the evolution of species. Imagination of a high order is required to frame scientific generali-

sations called theories. Historical studies are again not a mere record of dates and facts. To remember them will be merely an exercise for memory. Imagination must vivify in present experience the march of events in history and judgment must apportion to historical movements their proper share in the development of races, nations and mankind. The creative function of imagination may forecast the future of social and political institutions from their history, and thus provide a basis for organised action on a national or an international scale. The imagination of President Woodrow Wilson, once a professor of history and political science, conceived the idea which is now the reality known as the League of Nations. The relative values of memory, imagination and judgment in thinking are well known. Assuming the existence of the basic factor, the will to work, mere exercise of memory will render our mathematical, scientific, historical and other studies purely cognitive. Learning is barren when it is memorising of extant knowledge. It will fructify in our experience only through the play of imagination and the exercise of judgment. For instance, if the study of the sciences degenerates into memorising a miscellany of disconnected facts the scientific habit of mind which seeks unity in the diversity of the phenomena of nature will not be developed. Reference has already been made to the value of the play of imagination and the exercise of judgment in the study of history. So for other studies. To illustrate further the working of the elements of thinking, we may take the task of writing an essay. If the preliminary disinclination, which has probably postponed the writing of the essay till the last day, has been overcome by an act of will, attention must still be kept occupied with the theme. If a person's reading has been wide and past experience varied, ideas relevant to the theme will suggest themselves to his attention. If

his memory is good, similar or allied ideas will come readily to the mind. After consideration, that is trial, he will select some ideas and reject the others. Judgment will dictate the choice. His description and expression may, through the play of fancy, impart to the ideas a quality of vividness. In painting a picture there will be greater attention to details and a little more of fancy. In constructing a machine less of fancy and a more minute observation and trial of parts and of their working will be needed. In all these illustrations, however, the same elements of thought enter in varying degrees.

Some practical maxims for clear and correct thinking which follow from the analysis of thought which has been attempted are suggested. *To set oneself to the task* is the first maxim, even though a person may not have the foggiest idea of how he is going to proceed about it. The will should overcome the preliminary disinclination felt by the person at the commencement of any piece of work. If he can also make it a habit not to procrastinate, he has taken the first step in learning to think. If one has started to think, effort of will is still required to keep one's attention from wandering from the topic engaging the mind. If the person's attention is of the easily wandering type he will need the force of will to overcome the handicap. To get at any clear and correct idea it is essential that he should be able to concentrate attention on his subject, the longer the better. Some great minds get so absorbed in their work that they entirely forget their surroundings. The howlers of professors have become proverbial. To get at the pearl of truth, however, one must dive deep down into the sea of thought. *To learn to lose oneself in the task is therefore another maxim.* If a person has read much and felt more, in direct and imaginative experience, his concentration of attention will yield vital ideas. A well-stored mind is a valuable possession.

It is however less essential that he should have read widely than that the little he has read should have become integrated through imagination into his mental structure. There is a Persian proverb which states the same fact: one ton of knowledge needs ten tons of wisdom. Sa'adi also says sagely that an ass laden with a cart-load of books will not cease to be an ass. Wisdom, as already stated, is learnt only in the school of experience. A very important maxim therefore is: *Base ideas on the vital grounds of direct and imaginative experience.* Thus only will the individual learn to free his thinking from second-hand ideas and cut it loose from the bonds of precedents, the prop of unthinking minds. He will thereby learn to avoid the trite and the commonplace. Particularly, if he has to do a piece of serious thinking or writing, it is wise not to read too many books on the subject just before doing it. He will only be diminishing the elasticity of his mind. Another maxim then is: *Do not clog the progress of mental activity by the 'furniture of the mind'.* One's thinking will be fresher for a little emptiness and more aeration of its machinery. Cut loose from crutches, thought and expression will be better when exercised partially on their own account. While felicity of expression has also to be acquired by practice, it needs but simple words to express vital ideas. The difficulty is to think them; and if one thinks them, one should ensure that they are based on fact and not fancy. This is a wise maxim: *Make sure of the data.* If one is doubtful of the meaning of a word or of facts and figures he should look it up in the dictionary, make friends with encyclopædias and reference books, verify his statistics and get at the sources of the knowledge that he wishes to use. This hard discipline is necessary to acquire the valuable habit of precision of thought. Precision of thought is, however, more than mere accuracy in facts, it is the result also of deliberation in

judgment. If thinking proceeds by the method of trial and error, it is well not be carried away by our first thoughts. To sleep over a momentous decision in an important matter is the sound advice of commonsense. A very practical maxim then is: *First thoughts may be good, second thoughts may be better*. Deliberation in judgment should not however degenerate into vacillation. Do not, in the words of Hamlet, allow "the native hue of resolution to be sicklied o'er with the pale cast of thought". After all the habit of quick decision, if generally sound, is a valuable trait of the mind. To come to the last and most important practical maxim; the wisdom which it embodies needs to be widely cultivated. It is a simple maxim: *Keep an open mind*, which is very much overworked in theory and equally neglected in practice in the religious, political and social controversies in India today. The issues or rather the clouding of issues in social legislation, say the Sarda Marriage Act, provided an apt illustration of confusion of thought. Any old custom in India finds ready-made sanctions in religion. Communalism swears most fervently by appeals to religion. The surprising thing is that each party to the controversy exhorts the other to keep an open mind and straightway proceeds to base its case on religious dogmas and shibboleths of doubtful validity. It has been stated earlier that it is desirable that attention should consider a question from every point of view; the antithesis to this is that attention should readily fasten itself on a ready-made antiquated formula. A British politician, who was also a philosopher, coined the phrase "Let us clear our mind of cant", an exhortation which would be apposite in India today. Let us therefore clear our mind of outworn notions, time-honoured prejudices and pseudo-religious sentiments and let the dry light of reason enter and illumine it.

INDEX

A

Adam. 183.
 Agra U. 100, 104, 122.
 Agricultural College, Cawn-
 pore. 104.
 Alexander. 187.
 Aligarh U. 100, 104, 110, 122,
 128.
 Allahabad U. 100, 122, 192.
 All-Asia Educational Confer-
 ence. 3, 25.
 America. 10, 109.
 American. 9, 10, 109.
 Americanism. 190.
 Andhra U. 100.
 Annamalai U. 100.
 Arabian Nights. 196.
 Aristotelean. 9, 104, 184.
 Aristotile. 104, 171, 181.
 Arjun. 188.
 Aryan. 12, 115, 118, 119, 146.
 Aryavarta. 149.
 Asia. 23.
 Asiatic. 165.
 Ayurvedic. 104.

B

Benares U. 87, 100, 101, 104,
 110, 122, 128.
 Bengal. 13, 14, 17, 24, 110.
 Bhagwat Gita. 189.
 Bharat Seva Mandal, Benares.
 117, 118.
 Bolpur. 24, 110.
 Bombay. 100.
 Bose, Sir J. C., 104.
 Buddha. 138.

Buddhist Monasteries. 139.
 Burma. 100, 139.
 Byronic, Byronism. 187.

C

Calcutta U. 100.
 Calcutta U. Commission. 24.
 Caliph. 197.
 Cambridge. 101.
 Canadian. 109.
 Carlyle. 192.
 China. 162.
 Christ. 14, 138.
 Christian College, Lucknow
 123.
 Christian ethics. 14.
 Christianity. 13, 14.
 Christian missions. 13.
 Cinderella. 18, 41, 85.
 Communist. 175, 184, 190.
 Confucius. 138.
 Croesus. 187.

D

Dacca U. 100.
 Dalton Plan. 2.
 Danish. 134.
 Darwin. 201.
 Das, S. R. 2, 86.
 Dayanand. 24.
 Dehra Dun. 86.
 Delhi U. 100.
 Denmark. 129.
 Dewey. 184.
 Diogenes. 181.
 Director of Industries. 4.
 Dumfermline, Scotland, College
 of P. T. & Hygiene. 128.

E

Einstein. 201.
 England. 10, 59, 71, 87, 125,
 136, 165, 183.
 Europe. 12, 138.
 European. 12, 106, 165.
 Eve. 183.

F

Fisher Act. 11.
 Froebelian ideal. 11.

G

Gandhi. 163.
 German. 10, 110.
 Germany. 8, 109, 111.
 Gestetner machine. 93.
 Goethe. 85.
 Gokhale, Mr. G. K. 107.
 Gospel. 13.
 Great Britain. 84, 125.
 Greece, classics of. 12.
 Greek. 168.
 Gujarat Vidyapith. 110.
 Gurukula, Hardwar. 2, 87, 110,
 120.

H

Hamlet. 205.
 Hartog Committee. 28, 185.
 Hegelian apotheosis. 10.
 Hegelian philosophy. 9.
 Himalayas. 181.
 Hindu Hostel Literary Union.
 192.

I

Industrial Revolution. 25.
 Islam. 12.
 Islamic period. 149.

J

Jamia Millia, Delhi. 110.
 Japan. 8, 165.

K

Karvalyadhama Institute. 120.
 Kashi. 87, 145.
 Kashi Vidyapith. 110.
 Kashmir. 145.
 Kilkpatrick. 184.
 King George's Medical Col-
 lege, Lucknow. 104.
 Kipling. 72.
 Koian, Holy. 12.
 Krishna. 188.
 Kurukshetra. 188.
 Kuvalyanand. 120.

L

"Leader", The. 7.
 League of Nations. 111, 162,
 202.
 Legislative Council. 28, 53.
 Literary Union, Teachers' Train-
 ing College, Benares. 82, 164.
 Lonavala (Poona). 120.
 Lucknow U. 100, 104, 122.

M

Macdonald, Mr. Ramsay. 7.
 Madras. U. 100.
 Malaviya, Pt. Madan Mohan
 107.
 Mechanical and Electrical
 Engineering College, Benares
 University. 104.
 Muhammad. 138.
 Muslim. 146.
 Mysore U. 100.

N

Nagpur U. 100.
 Nalanda. 101.
 Napoleon. 10, 199.
 Nero. 187.
 Newton. 201.
 New Testament. 12.

Non-gazetted Educational Officers' Association. 1.
Normal School, Muzaffarnagar. 129.

O

Old Testament. 12. •
Osmania U. 100. •
Oxford U. 101, 111.

P

Patna U. 100.
Platonic academy. 104.
President of the Board of Education. 59.
Prussia, 10.

R

Ramarajya. 26.
Ram Mohan Roy, Raja. 14, 15.
Rangoon U. 100.
Rhodes, Cecil. 111.
Rhodesian. 111.
Rishikul, Hardwar. 24.
Rome, civilisation of. 12.
Ronaldshay, Lord. 17.
Ruskin. 136.
Russel, Bertrand. 8, 190

S

Sa'adi. 204.
Saraswati, Goddess. 83.
Sarda Marriage Act. 205.
Servants of India Society, Poona. 107.
Seva Samiti, Allahabad. 107, 118.
Shah Jehan. 196.
Shantiniketan, Bolpur. 2.
Simon Commission. 128.
Simon Stylites. 181.
South Africa. 111.

Soviet Russia. 175, 184, 185, 190.
Spencer, Herbert. 11.
Stalky & Co. 72.
St. Vitus' Dance. 133.
Swedish. 134.

T

Tagore. 24, 110, 163.
Taj Mahal. 196.
Taxila. 101.
The Punjab. 26, 100, 185.
The Punjab U. Inquiry Commission. 185.
The Times Educational Supplement. 125.
Tom Brown's School Days 72.
Training College, Allahabad. 128.

U

Unani system of medicine. 104.
U. S. A. 185.
U. T. C. 123.

V

Vedas. 12, 120.
Vedic. 24.
Village Aid Scheme. 27.
Vishvabharati, Bolpur. 24, 110.

W

Woodrow Wilson. 202.

Y

Yoga 119, 120.
Yogic. 119, 120, 121.
Y. M. C. A. Physical Training Institute, Madras. 124, 128, 129.

Z

Zetland, Lord. 17.